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SOAP *and* Chemical Specialties

this issue...

ting soaps not fazed
synthetics' competition

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nt strippers — Curtain
d on non-flammables

* * *

king cleansers in bags
s costs, adds markets

* * *

owroom key to better
es of sanitary supplies

r photo . . . Samuel C. Johnson, , director of new products de-opment, stands with his father, bert F. Johnson, president of C Johnson & Son, Inc., overlook-Racine headquarters "Great k Room." The son is fourth ration of famous wax family. e photographs on pages 174-175.

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that meet your
product's
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Fbi news

FOR THE SANITARY CHEMICAL JOBBER AND DISTRIBUTOR

PRODUCTS, PROSPECTS, TRENDS AND MARKETS

PUBLISHED BY FULD BROTHERS, INC., MANUFACTURING CHEMISTS • SANITARY CHEMICALS
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Volume XXXI, No. 9 September, 1955

SOAP and Chemical Specialties

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Editor
FRANK J. REILLY

CHARLOTTE HAAS
Associate Editor

Advertising Manager
THOMAS MORGAN

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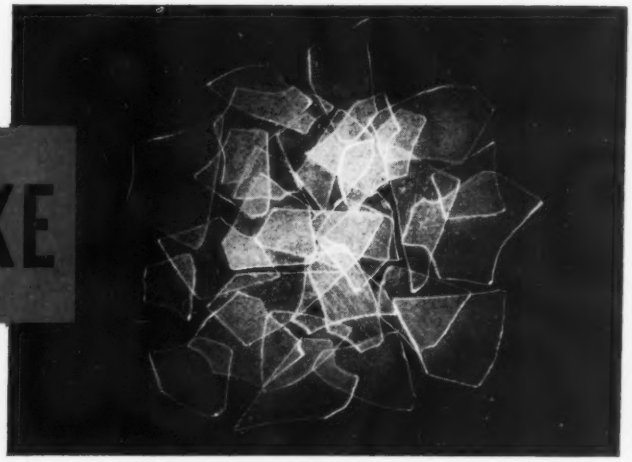

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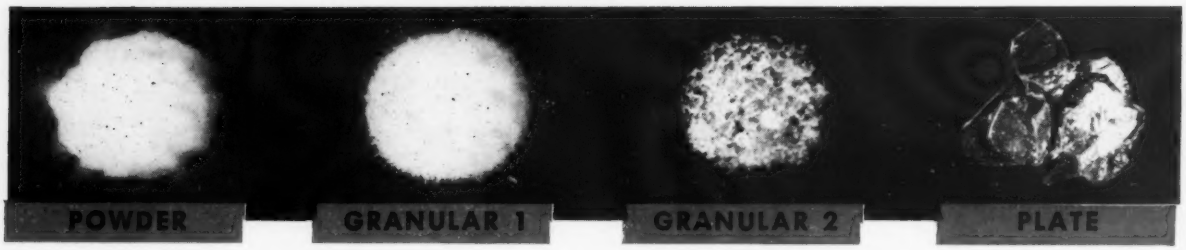

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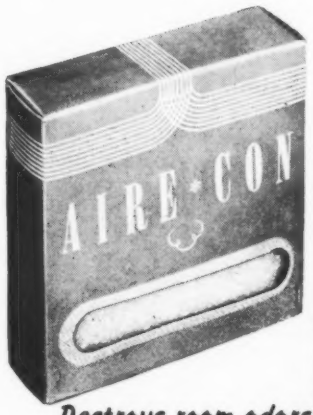

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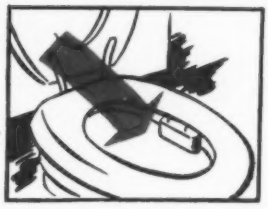

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A modified sodium and triethanolamine lauryl sulfate—modified for greater sudsing, improved clarity, more fluidity, and lower costs. Exceptionally well suited for compounding clear liquid and liquid cream shampoos. Can be used with both acid and alkaline additives, conditioners, emollients, etc.

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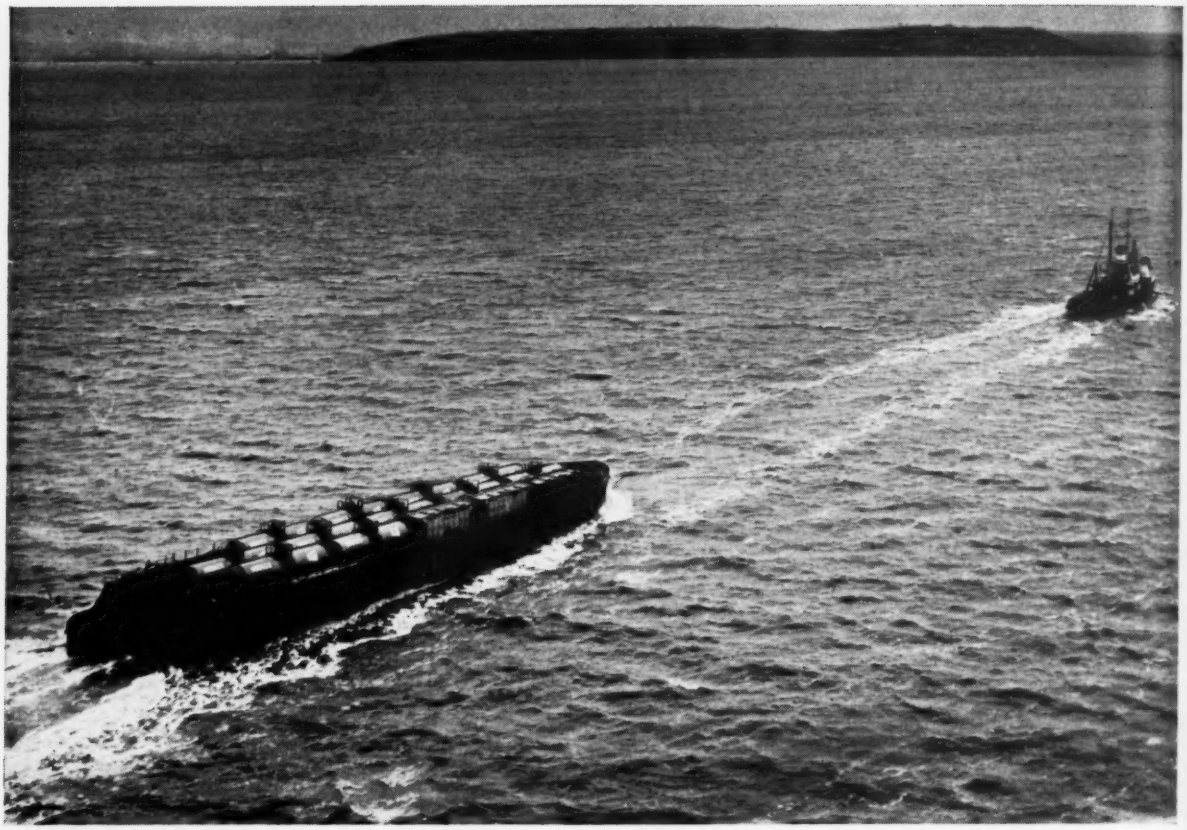

ECONOMY-SIZE PACKAGE. Chartered barge, one of a fleet used in Hooker West Coast service, carries 11 cars of liquid chlorine and other chemicals on deck. Below deck are carried, 1,000 tons of caustic soda. The barge is seen here in Elliott Bay off Seattle, en route to a pulp mill in British Columbia.

Could chemicals-by-barge save you $72,000 a year?

Tests may show that there's little brand difference in some of the heavy chemicals you buy. But there can be a real dollars-and-cents difference.

Often, *how you get them* makes that difference.

For example, a large midwestern processor had been buying 50% liquid caustic soda by tank car. At our recommendation this company decided to receive caustic by barge. The result: a $72,000-a-year saving.

If you can take caustic soda by water, why not look into barge delivery? All Hooker plants and caustic terminals, are located on deep water. There's a good chance that delivery by barge, specially chartered or Hooker-operated, can pile up real savings for you.

Call the nearest Hooker sales office or write us for more information on the dollars-and-cents difference the right method and volume of delivery can make for you.

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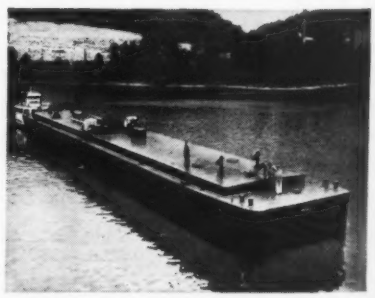

MIDWEST CUSTOMERS near Great Lakes get rapid service from Montague, Mich., or from Chicago. Two men can unload a 300-ton shipment of caustic soda from this specially-built Hooker barge in one fast, smooth operation.

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In many cases, reduced amounts of the new alkylolamide can be used for imparting foam stability and viscosity to liquid dishwashing detergents and shampoos, thus resulting in overall economy.

Similar products based on lower cost coconut acids are also available, such as NINOL 2012 EXTRA and NINOL 128 EXTRA.

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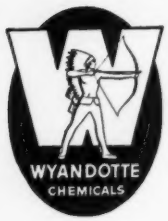

How Wyandotte's Pluronics help you

Makers of shampoos and other hair preparations are enjoying important benefits from the many advantages offered by the Pluronics—Wyandotte's series of 100%-active nonionic surfactants. For, with the Pluronics, it is possible to select a better balance of desirable properties for a given formulation. Some examples:

1. **The Pluronics are nonirritating to eyes and skin**
2. **The Pluronics provide excellent detergency**
3. **The Pluronics have oil-removal properties which leave the hair soft and manageable**
4. **The Pluronics are compatible with other shampoo ingredients**
5. **The Pluronics are practically odorless**
6. **The Pluronics come in a wide choice of physical forms: liquid, paste, flake, solid cast**

What is so different about the Pluronics?

The Pluronics are a unique series of nonionic surface-active agents, based on a chemical concept not previously used in the synthesis of nonionics. Because of their wide range of properties and grades, they offer extreme flexibility in formulation.

With the Pluronics, it is possible to formulate shampoos and hair preparations varying from low-viscosity liquids to flake forms and solids. For each Pluronic grade – including flake – is 100% active, and contains no diluents or fillers.

With the Pluronics, you can prepare a product to meet almost any molecular weight or hydrophobic-hydrophilic balance. For the Pluronics range in molecular weight from 800 to 8000—compared to 300 to 700 for ordinary surfactants.

The Pluronics are the first commercial example of a block-polymer-type surface-active agent. There is no comparable product on the market. Thus, to fully realize their advantages, you must thoroughly investigate them in your own laboratory.

Evaluate the Pluronics as a basis for an entirely new approach in formulating . . . they may prove the key to compounding concepts that open up new avenues of progress for your company.

Are the Pluronics safe to use?

The Pluronics have an unusually low order of eye irritation. Extensive tests have also shown that the Pluronics are not primary sensitizers for human skin. In fact, because they are nonionic and are neutral in pH, the Pluronics are considerably less irritating to the skin than the ordinary anionic and cationic types of detergents. Generally, they may be used safely by persons with sensitive skin, as well as by those allergic to soap.

What about grease removal?

The grease-removal properties of the Pluronics are directly related to their hydrophobic-hydrophilic balance. Since a series of Pluronics is offered, it is possible to select the Pluronic with exactly the grease-removal properties desired. By leaving the proper amount of hair oil, the Pluronics impart a desirable sheen to the hair, and make it much easier to control immediately after washing. The Pluronics are exceptionally effective, too, in shampoos for dyed hair.

*Report on Wyandotte Pluronics**

formulate better shampoos

Do the Pluronics provide effective detergency?

The objective of shampooing hair, of course, is to remove extraneous soil particles. The Pluronics have exceptional detergency and soil-suspension properties which remove this "dirt" quickly and thoroughly. An important advantage of the Pluronics — as mentioned above — is their ability to perform this function without the unnecessary removal of most of the natural hair oil. And the Pluronics provide good cleaning action, even in hard water.

What about compatibility?

The Pluronics are compatible with all types of products commonly used in shampoos. Being nonionic, the Pluronics are completely compatible with soap and other anionic surfactants, with quaternaries used in dandruff-remover shampoos, and with water of any hardness. In addition, the Pluronics are compatible with auxiliary materials, such as dyes and perfumes—and they may also serve to solubilize some types which have limited water solubility.

Can the Pluronics be combined with high-foaming agents?

Yes. As with grease removal, the lathering properties of the Pluronics are related to their hydrophobic-hydrophilic balance. More hydrophilic members of the series have initial lathering properties approaching those of alkylarylsulfonates. Generally, however, the Pluronics are low foaming. In shampoos where lathering is of prime importance, the Pluronics may be successfully combined with high-foaming agents.

Are the Pluronics used in many other hair-preparation applications?

Because of their wide range of properties and flexibility of formulation, new uses for the Pluronics are being discovered practically every day—and the end is nowhere in sight. Besides their use in standard and specialty shampoos, they are being used in hair tonics, special hair preparations, hair bleaches, sun-tan lotions, stick deodorants, perfumes, shampoo bars for animals —to name just a few.

Send for samples and full data

Call your local Wyandotte representative, or write us direct. We will supply the proper samples of the Pluronics, a data sheet summarizing their physical and surface-active properties, technical information on the use of the Pluronics in shampoos, and prices. Write us today . . . or mail coupon below. *Wyandotte Chemicals Corporation, Wyandotte, Michigan. Offices in principal cities.*

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Wyandotte Chemicals Corporation
Inquiry Section SCS, Wyandotte, Michigan

Please send:

☐ Data sheet on the use of Pluronics in shampoos
☐ Samples of Pluronic L64 (liquid), F68 (flake) for use in shampoos
☐ Data on Pluronics for (state application): _____
_____
☐ Have your representative call on me

Name _____

Firm _____ Title _____

Address _____

City _____ Zone _____ State _____

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FEATURES

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- ★ Hard (not tacky)
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SUPER CAND-DOX is not meant to replace our other high quality products... it is intended to be a valuable addition to our line for applications that require better anti-slip performance than is obtainable anywhere else without loss of any other important feature of a water emulsion self-polishing floor wax.

For more details, samples and prices, write, wire or phone us. We urge you to make a test application under your own conditions for the most convincing proof of all.

*LUDOX Colloidal Silica, Trademark of E. I. Dupont de Nemours & Co., (Inc.) Reg. U. S. Pat. Off.

The laboratory research effort of our organization is very important in our development of new useful products. If a definite improvement can be accomplished by the use of new additives, we endeavor to formulate such ingredients so as to produce final products which conform to our very high standards of product function.

Only FIELD TESTING proves the actual value of a floor treatment. CAND-DOX floor treatments have been thoroughly field tested and are being sold in quantity by most of our distributors with success.

All of our products are available for private brand resale and are sold only through distributors except for experimental accounts in Chicago essential to research.

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- CAND-DOX® # BB
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- BRIGHT BEAUTY (Standard)
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BLOCKSON CHEMICAL COMPANY · JOLIET, ILL.

☐ Send data sheet on TEOX 120 ☐ Include testing sample
☐ Send bulletin on detergent compounds incorporating TEOX 120.

*Name*_____ *Title*_____

*Firm*_____

*Address*_____

*City*_____ *Zone*____ *State*_____

Nopco announces . . .

THE HYONICS

3 Series of Detergents that give almost any property desired by makers of household and industrial detergents

No "trimmings" to this ad. We simply want to give you as much information as we can put on one page, about what these versatile new Nopco products can do for your detergents.

The Hyonic PE Series is a group of 100% active, nonionic, ethylene condensates. Among the uses of PE 225 are: automatic laundry and dishwashing detergents, car wash powders, wall and floor cleaners. Typical uses of PE 250: in dairy detergent powders, antiseptic sanitizing detergents, dairy milkstone removers. PE 275 may be used in: light duty liquid detergents, pot and pan degreasers, dry cleaning solvent cleaners.

The Hyonic FA Series is a group of alkylolamide derivatives. Of these, FA 20 and FA 40 are 100% active; FA 75 is 70% active. FA 20 is used in dairy cleaners, household degreasers, wax emulsions, among others. FA 40 is useful in floor cleaners, liquid steam cleaners, bottle washing compounds, rug shampoos. FA 75 is ideal for window cleaners, bar glass cleaners, liquid scouring concentrates.

Hyonic FS, a 100% active lauric acid alkylolamide condensate, is recommended as a foam stabilizing additive and detergent synergist. Being a liquid, not a paste, it permits easy addition to liquid and spray-dried formulations. It is used chiefly in shampoos, bubble baths, cosmetics, and some dishwashing detergents.

Partial List of Properties of Hyonics PE, FA, FS

	PE 225	PE 250	PE 275	FA 20	FA 40	FA 75	FS
Soluble in wide variety of organic solvents and electrolytic solutions	✓					✓	
Excellent detergency on fabrics			✓	✓			
High thickening action					✓		✓
Outstanding detergency with phosphate builders					✓	✓	
High detergency over wide ranges of pH		✓					
High detergency over wide ranges of temperature	✓						
Not inactivated by metallic salts	✓						
Compatible with soaps, anionics, cationics	✓						
High foaming		✓	✓	✓	✓	✓	✓
Low foaming	✓						
Effective with alkaline builders	✓		✓	✓			
High detergency over wide ranges of water hardness		✓					
Non-corrosive to iron and steel			✓		✓		
Good wetting agent				✓	✓	✓	✓
Low viscosity curve			✓	✓		✓	
Stable in presence of acids, alkalies, inorganic salts		✓					
Foam Stabilization							✓

In this fast-growing, competitive field of detergents, Nopco's technical men will work with you to the fullest. Write for full information today. Nopco Chemical Company, 706 Industrial St., Harrison, N. J.

NOPCO

PLANTS: Harrison, N. J.
Cedartown, Ga. • Richmond, Calif.
London, Ont. Canada

LAB-COTE

CLEAR, HARD, DURABLE, RESILIENT FLOOR DRESSING

High Gloss Safety for every Surface!
It's Buffable! Removable!

Approved by York Research Corporation for acceptance by the American Hotel Association

Here is clear, *natural* beauty for all floors! LAB-COTE is *not* a wax. It is a *transparent*, long-wearing, floor dressing . . . that protects as it beautifies. LAB-COTE dresses floors with pure, lasting beauty—like a cellophane wrap!

KEEPS FLOOR UPKEEP DOWN!

This Cost Control Chemical* for beautiful floorkeeping is easy to apply—easy to maintain. Soil stays on top . . . wipes off with a damp mop. Even traffic lanes shine after light buffing. Although rugged and hard, LAB-COTE is easy to remove when desired.

SAFER TO WALK UPON!

LAB-COTE gives 40% higher anti-slip value than minimum standards—*with beauty, durability . . . easy maintenance.*

Chemical Service of Baltimore, Inc.

HOWARD & WEST STREETS ★ BALTIMORE 30, MARYLAND

Other Oronite Surface Active Products:

Detergent Alkane
(Basic Raw Material)
Detergent Slurry
Detergent D-60
Purified Sulfonates
Sodium Sulfonate No. *5*
Wetting Agents
Dispersant NI-O
Dispersant NI-W
Dispersant FO
(Burner Oil Additive)

Switch to D-40SF (the *dust-free* flake form of Detergent D-40) to repackage for car wash or other light duty products—or compound D-40SF for heavy duty use. You'll discover there is none of the annoying dust so frequently associated with dry detergents.

Oronite's unique classifying system in the manufacturing process eliminates the fine dust particles from D-40SF, providing you a desirable dust-free product. Prove this to your own satisfaction. Write for a free sample of D-40SF and compare it to the product you are now using. You'll see the difference immediately. And this extra quality feature of D-40SF is at no premium in cost.

Oronite, the world's largest producer of detergent raw materials, offers Detergent D-40 in three different particle sizes—flakes (D-40SF), granules (D-40) and powder (D-40FG). Write any Oronite office for free samples or "use" bulletins showing a variety of fields where D-40 can be successfully used.

ORONITE CHEMICAL COMPANY

3400

ORONITE CHEMICAL COMPANY
200 Bush Street, San Francisco 20, California
30 Rockefeller Plaza, New York 20, New York
20 North Wacker Drive, Chicago 6, Illinois
714 W. Olympic Blvd., Los Angeles 15, California
Mercantile Securities Building, Dallas 1, Texas
Carew Tower, Cincinnati 2, Ohio

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After Closing . . .

NPCA Meeting Plans

The program of the National Pest Control Association's 22nd annual meeting in Denver, Oct. 17 through 20, will include a half day session on the subject, "What it Costs to do Business." Principles of advertising and insurance problems will be studied. On the technical side the following subjects have been scheduled: toxicology of pesticides; control of insecticide-resistant roaches; flea control problems; weed control; termite investigations, especially the Building Research Advisory Board's investigations for the Federal Housing Authority; rodent control, bird control; and sanitation in relation to pest control in bakeries, in restaurants, and in grain storage and processing plants.

— ★ —

Cosmetic Chemists Meet

R. B. Willson, president of R. B. Willson, Inc., New York, will be guest speaker at the Sept. 28 dinner meeting of the New York Chapter of the Society of Cosmetic Chemists. The meeting will be held in the Metropolitan Room of the Brass Rail Restaurant, New York. Mr. Willson, who is chairman of the Honey Industry Council of America, will present a paper entitled "Honey Bees and Royal Jelly" and will show a 30 minute color film on his subject.

— ★ —

New Magee Floor Product

A new treatment for both old and new concrete floors that binds, fills, seals and finishes was announced late last month by Magee Chemical Co., Bensenville, Ill. Trade named, "Treet Creet," the new material is claimed to dry quickly to a hard, tough finish. To be sold exclusively through sanitary supply distributors, the new product will be backed by an incentive sales promotion program running from Sept. 1 to Dec. 1, 1955. Salesmen participating in the program have an opportunity to win nationally advertised electrical appliances of such leading manufacturers as General Electric, Admiral, Sunbeam, Elgin and many other brands. A four-page, two-color folder on "Treet Creet" is available for distribution by jobbers to garages, schools, hospitals, factories, warehouses, etc.

— ★ —

David Crampton Dies

David Crampton, chief chemical engineer of Wallace & Tiernan, Inc., Belleville, N. J., was drowned Aug. 28 while swimming in the ocean off Mantoloking, N. J. With Wallace & Tiernan for 24 years, Mr. Crampton supervised all engineering work at the chemical plants of the Lucidol Division at Buffalo and Geneseo, N. Y., of the Harchem Division at Dover, Ohio, and of Maltbie Laboratories Division, Belleville, N. J.

That's really a big fish (on the left)! The other fellow is Jack Varley, president of James Varley & Sons, St. Louis. Said Mr. Varley after he landed this Blue Marlin off the coast of Bimini: "He was 373 pounds of sheer dynamite! Took (puff, puff) over two hours to land 'im. (Puff, puff) Three times he peeled off 600 yards of line (puff, puff) and in my condition I thought the fish was going to win our battle. Next time, I'll settle for a five-pound bass out of the White River, Current River or any river that has a five pound bass." They say that Mr. Varley is going to have the big beast stuffed and hang it in his office.

— ★ —

Wyandotte Revamps M. A.

Bert Cremers has been elected vice-president and general manager of the reorganized Michigan Alkali Division of Wyandotte Chemicals Corp., Wyandotte, Mich., it was announced late in August. The division now incorporates the former Michigan Alkali sales and manufacturing divisions. Other newly constituted divisions are research and engineering, which includes the former research activities, engineering, production research and new business development departments; general products, which includes purchasing, traffic and non-chemical sales and manufacturing operations. The changes became effective Sept. 1.

In his new post Mr. Cremers is in charge of divisional sales activities and manufacture of all Wyandotte chemical products. When Michigan Alkali and J. B. Ford Co., were consolidated in 1942 to form the Wyandotte Chemicals Corp. Mr. Cremers became vice-president of the sales division. Prior to this he had been manager of distribution, sales manager, and director of sales for Michigan Alkali. He served on the Chlorine-Alkali Subcommittee of the Army-Navy Munitions Board during World War II, is a director and vice-president of the Chlorine Institute and past trustee of the Glass Container Manufacturers Institute.

The research and engineering division is headed by newly elected vice-president Frank Wolcott. Associated with Wyandotte since 1951, Mr. Wolcott was vice-president and general manager of manufacturing for the company.

George W. Schwarz becomes vice-president and general manager of the general products division. He was formerly controller, treasurer and vice-president.

Manufacture and sale of in-

dustrial and specialized cleaning compounds continues under the J. B. Ford Division, directed by Ford Ballantyne, Jr., vice-president and general manager.

—★—

DCAT Hears Peterson

Val Peterson, Federal civil defense administrator and former Governor of Nebraska, will be the guest speaker at the 65th annual meeting of the Drug, Chemical and Allied Trades Section of the New York Board of Trade to be held September 22-24, at Pocono Manor Inn, Pocono Manor, Pa. This was announced late in August by W. Boyd O'Connor, chairman of the business program committee.

Also honored will be Harry J. Anslinger, U.S. commissioner of narcotics. He will be given a special award in recognition of his many years of outstanding government service and in commemoration of his 25th anniversary as U.S. narcotics commissioner.

—★—

New Dura Test Sheet

A new paper test sheet for self-polishing floor finishes has been introduced recently by Dura Commodities Corp., New York. Developed by Kurt J. Wasserman, technical vice-president, these sheets are designed for use by laboratories in the observation of basic film characteristics, such as gloss, depth, hardness, flexibility, water resistance and other properties. The test sheet is divided into three areas of which two are dark green and the third flat white. The white area is intended to test for discoloration, a factor because of the growing trend toward lighter and pastel colors in floor coverings. Most test sheets in use are of uniform black color, which makes the results less realistic.

Samples of the new test sheets are available to wax development and testing laboratories who request them on their letterheads, and limited quantities will be supplied by Dura to its customers. For general distribution the sheets are offered at cost.

Warwick Names Campbell

Waxes produced by Warwick Wax Co., a subsidiary of Sun Chemical Corp., Long Island City, N.Y., will be serviced and distributed in Pittsburgh and western Pennsylvania by Lee W. Campbell of Pittsburgh, it was announced recently.

Mr. Campbell, who is president of Campbell Chemical Co., Pittsburgh, will service Warwick waxes in western Pennsylvania as the result of a program of cooperation between his company and Shamrock Chemical Corp., which represents Warwick throughout the Commonwealth of Pennsylvania.

—★—

Traces Aerosol Growth

The development of the pressure dispensed aerosol insecticide from the days of the early experiments of Goodhue and Sullivan with insectifuges through the high pressure aerosol "bombs" of World War II and on to the low pressure aerosol can is described in an article in the August-September issue of the *Du Pont Magazine*. The article, "The Bomb That Exploded Into a $250 Million Business," commemorates the 25th anniversary of the first manufacture of "Freon" compounds next January and the tenth year of the marketing of aerosol insecticides for civilian use.

The aerosol pioneers mentioned, in addition to Messrs. Goodhue and Sullivan, other U.S. Department of Agriculture scientists, including R. A. Fulton, John H. Fales and E. R. McGovran. From their work has emerged an industry that by 1954 was producing annually more than 60 million cans of insecticide, over 30 million units of hair spray, more than double the 1953 total, and more than 42 million cans of shave cream, better than 50 per cent more than the previous year's total. In the drug and pharmaceutical fields estimates are that by 1963 between six and seven million units of products in this category alone will be produced, according to the article.

New, wet-dry industrial vacuum cleaner, called the "Vacmobile," was announced recently by West Disinfecting Co., Long Island City, N. Y. Unit has 1¼ hp motor, non-marking rubber wheels and handle bar for convenient carrying.

—★—

New Floor Finish Specs.

Revised specifications for finishes for hardwood floors were issued last month for the Maple Flooring Manufacturers Association, 35 East Wacker Drive Chicago 1, by Timber Engineering Co., 4812 Minnesota Avenue, N. E., Washington 19, D. C., official laboratory for the association. The new specifications became official on Sept. 1, 1955, and amend and supersede those issued in 1952. They establish standards for finishes for both heavy duty and gymnasium type floors. Copies of the specification can be obtained from the association and from Timber Engineering.

—★—

Witco Emulsol Calif. Rep.

Emulsol Chemical Corp., Chicago, has appointed Witco Chemical Co., New York, as technical sales representative in the California area. Witco's San Francisco and Los Angeles offices will be responsible for Emulsol's surfactants used in the industrial cleaning, sanitizing, petroleum, and sanitation specialties fields. W. G. Wunderly Co., Pasadena, and F. M. Speekman Co., San Francisco, provide Emulsol technical sales and service in southern and northern California, respectively, in the pesticide, food, and cosmetics fields.

Eastern NSSA Meeting Oct 11-12

A PANEL discussion on market research by sanitary supply distributors will highlight the Sixth Eastern Regional Meeting of the National Sanitary Supply Association to be held Oct. 11 and 12 at the Penn-Sherwood Hotel, Philadelphia. The panel will be composed of Jack Hirsch, head of Formula Floor Products, Newark, N.J.; Dr. Harry J. Wolfe of Colgate-Palmolive Co., Jersey City, N.J., and A. J. Wood of A. J. Wood & Co., Philadelphia, market research consultants.

Mr. Hirsch will discuss the need for and the tools available to the jobber in doing market research. Dr. Wolfe will explain fundamental techniques of testing and surveying markets. Mr. Wood will describe the role of the market research consulting firm.

The panel on market research will take place during the afternoon session on Oct. 12.

Sales problems encountered in the field will be the subject of another symposium, participants in which will be top sales personnel from the distributing and manufacturing fields.

In addition, the meeting will hear from the executive vice-president of the National Sanitary Supply Association, Leo J. Kelly, who will discuss the use of the selling tools furnished by the Association to its members for increasing the sanitary supply distributor's volume.

Lacy Crain of Conco Chemical Co., Dallas, president of NSSA, will outline plans and programs the association is undertaking this year. Also reporting on activities of NSSA will be its national vice-president, Jack Kahn, of Windsor Wax Co., Hoboken, N.J.

A luncheon speaker, whose name has not been announced as yet, will review the fundamentals of selling in today's market.

This year's Eastern Regional Meeting, held for the first time away from New York City, will revert to a one-day affair. It will be climaxed by a reception and banquet on Oct. 12.

For the benefit of early arrivals and to provide those attending the meeting with an opportunity for informal discussions before the formal sessions get underway, a reception is planned for the evening of Oct. 11. This will be purely social in character and a large attendance is anticipated.

Charles Solly of Harley Soap Co., Philadelphia, is general chairman of the meeting. Co-chairmen are Burton L. Feinson, American Dispenser Co., New York, eastern regional vice-president of NSSA, and Jack Kahn. Chairman of the program committee is H. E. Galer of Galer & Hultz, Inc., Philadelphia.

Other committee chairmen and co-chairmen include Lester M. Rosenberger, National Milling and Chemical Co., Philadelphia, registration; Sam Newman, Creco Co., Long Island City, N.Y., entertainment; Howard Albertson, Mione Mfg. Co., Collingdale, Pa., chairman, and Alan Newmayer, Fidelity Cleaning Supply Co., Philadelphia, co-chairman, hospitality; Frank J. Reilly, editor *Soap & Chemical Specialties*, chairman, and Jack Hirsch, Formula Floor Products, Newark, N.J., co-chairman, publicity; and Alfred Colavito, Clan Mfg. Co., Camden, N.J., chairman, and William Kane, American Hand Dryer Co., Philadelphia, co-chairman, attendance.

Charles Solly

H. E. Galer

—★—

Reactivate Biddle-Sawyer

Biddle-Sawyer Corp., New York, has been reactivated as an independent unit, it was announced last month. Officers are: W. Chavkin, president-treasurer; R. A. Baldini, vice-president; and J. D. Haim, vice-president. Located at 20 Vesey Street, New York, the firm will continue its export and import business in oils, waxes, gums, drugs, and other related materials. Prior to this recent step the firm was known as Biddle Sawyer Division of River Plate Corp.

—★—

C W V Reelects Hopkins

Peter Hopkins, manager of the jobber sales division of Airkem, Inc., New York, was reelected national vice-commander of the Catholic War Veterans at the recent CWV convention in New York City. He was elected to the post for the first time last year. He has also served as state commander in New York State and country commander in the Bronx. Mr. Hopkins is also a member of the executive committee of CWV.

A veteran of World War II, in which he served for 4½ years as a captain in the Air Force, Mr. Hopkins also served as a captain in the 40th Infantry Division in Korea for seven months. Earlier he served in Japan for five months.

Johnson Regional Managers

S. C. Johnson & Son, Inc., Racine, Wis., has named four regional managers in the course of last month: J. C. Lansford has been appointed southwest regional manager with headquarters in Dallas. With Johnson's sales organization since 1941, Mr. Lansford now directs household product sales in Texas, New Mexico, Arizona, Louisiana, and parts of Oklahoma and Arkansas. Prior to his recent reassignment he held the post of western district manager, in which he is succeeded by T. E. McDermott. With headquarters in Denver, Mr. McDermott now directs sales of Johnson household products in Colorado, Kansas, Iowa, Minnesota, North and South Dakota, Nebraska, Wyoming, Idaho, Utah and parts of Wisconsin and Missouri. With the firm since 1931, he had previously held the position of Denver district manager.

Former Cleveland district manager J. G. Dick becomes eastern central regional manager directing sales from regional headquarters in Cleveland in Ohio, Michigan, West Virginia, western Pennsylvania, eastern Kentucky, and parts of northern Indiana. Mr. Dick has been with Johnson since 1936.

Household products sales in eight southeastern states are under direction of S. R. Heath, recently appointed southeastern regional manager with headquarters in Atlanta. Mr. Heath, who joined Johnson in 1941, was product manager in the advertising and merchandising department prior to his new appointment.

—★—

Bonewitz Names New Pres.

Bonewitz Chemicals, Inc., of Burlington, Ia., announced last month the election of G. D. Rosenkoetter as president. He succeeds P. W. Bonewitz, who becomes chairman of the board and remains treasurer of the corporation. Other officers are E. H. Ekdale, vice-president and secretary, and E. H. Dammann, assistant treasurer.

Thaddeus Lewandowski has joined the company as technical director, effective Aug. 15.

At the same time authorization of a new office building was announced. Scheduled for occupancy Nov. 1, it will be a one-story air-conditioned cement and brick building, located on the firm's property on Roosevelt Avenue.

—★—

Builds New Portland H. Q.

American Building Maintenance Co., San Francisco, and Easterday Supply Co., Los Angeles, moved into new branch headquarters in Portland, Ore., it was announced last month. The opening of the 40,000 square foot building was attended by company officials including Theodore Rosenberg, A.B.M. president; his brother Sydney Rosenberg, Easterday president; and two vice-presidents of A. B. M., Leo Strauss of San Francisco and Jerry Kelso of Seattle. The move into new quarters marked A. B. M's 25th anniversary in Portland according to Archie Hovey, local manager. The branch was organized by Harold Rathjen, father of Ralph Rathjen, now Portland manager of Easterday. A. B. M. was started as a window washing operation in San Francisco in 1909.

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Risdon French License

An exclusive license for the manufacture in France of the complete line of aerosol dispensing valves made by Risdon Manufacturing Co., Naugatuck, Conn., has been granted Vertez, S.A., a subsidiary of Henri Desjonqueres, S.A., it was announced recently by Risdon. The valves will be marketed through another subsidiary, Plasverre, S.A., 81 Rue Taitbout, Paris 9e, France.

—★—

Bruce Gains in 1955

E. L. Bruce Co., Memphis, Tenn., reported for the first half of 1955 a rise in net income to $1,186,364, earnings per common share of $3.70, and shares outstanding, 314,600. This compares with corresponding figures in 1954: $655,970; $2.20; and 286,000, respectively.

New "Freon" Sales Setup

The establishment of its own independent New York and Chicago district sales offices was announced last month by the Kinetics Chemicals Division of E. I. du Pont de Nemours & Co., Wilmington, Del.

Charles Wirth, III, was named New York district manager, with Norman Kent as Chicago district manager. The new offices will handle sales of "Freon" aerosol propellents, refrigerants, solvents and fire extinguishing agents. The offices are located in existing office quarters of the company's Organic Chemicals Department, to which the Kinetic sales organization had previously reported.

West Coast sales of the "Freon" compounds continue under the direct supervision of the Los Angeles district office of the company's Organic Chemicals Department, with A. J. Mease as district manager and Samuel N. Seely as sales supervisor for Kinetic.

—★—

Shell Chem. Names Four

Four new section leaders in the manufacturing development department were appointed recently by Shell Chemical Corp., New York: R. H. Hemmerich has been named leader of the research and patent section; A. V. Casselli of the chemical engineering section; C. MacHenry of the product section concerned with plastics and resins; and H. G. Staaterman of the product section responsible for developments in agricultural chemicals, solvents, and industrial chemicals.

—★—

George Melven Injured

George A. Melven, vice-president of Gillespie-Rogers-Pyatt Co., New York, was seriously injured Aug. 27, when he slipped on a diving board at a swimming pool in Massapequa, N. Y. Mr. Melven suffered a fractured ankle, and foot and shoulder injuries. He was taken to Amityville Hospital where he was put in a plaster cast. Following his release from the hospital, he returned to his home where he will be confined for several weeks.

Metal cleaners made with Du Pont Sulfamic Acid

remove scale and deposits . . . quickly . . . safely!

Sugar-mill operators, dairy owners, housewives *all* want metal cleaners that feature (1) speed, (2) safety, and (3) economy. And now with Du Pont Sulfamic Acid in the formulation you can give them all three!

Sulfamic Acid combines strong-acid efficiency with low corrosive action. It cuts through stubborn scale and grime . . . minimizes handling hazards and equipment maintenance costs. Now your customers can clean everything from copper pots to industrial boilers faster and more economically. And storage and packaging problems are virtually eliminated because Sulfamic Acid is an odorless, non-volatile crystalline powder.

This versatile acid can help increase *your* cleaner sales—both industrial and domestic. For more information clip coupon below and mail it to Du Pont.

MAIL THIS COUPON TODAY!

DU PONT
SULFAMIC ACID

DU PONT
REG. U.S. PAT. OFF.

Better Things for Better Living . . . *through Chemistry*

E. I. du Pont de Nemours & Co. (Inc.)
Grasselli Chemicals Dept., Room N-2539
Wilmington 98, Delaware
In Canada: Du Pont Company of Canada Limited, Box 660, Montreal

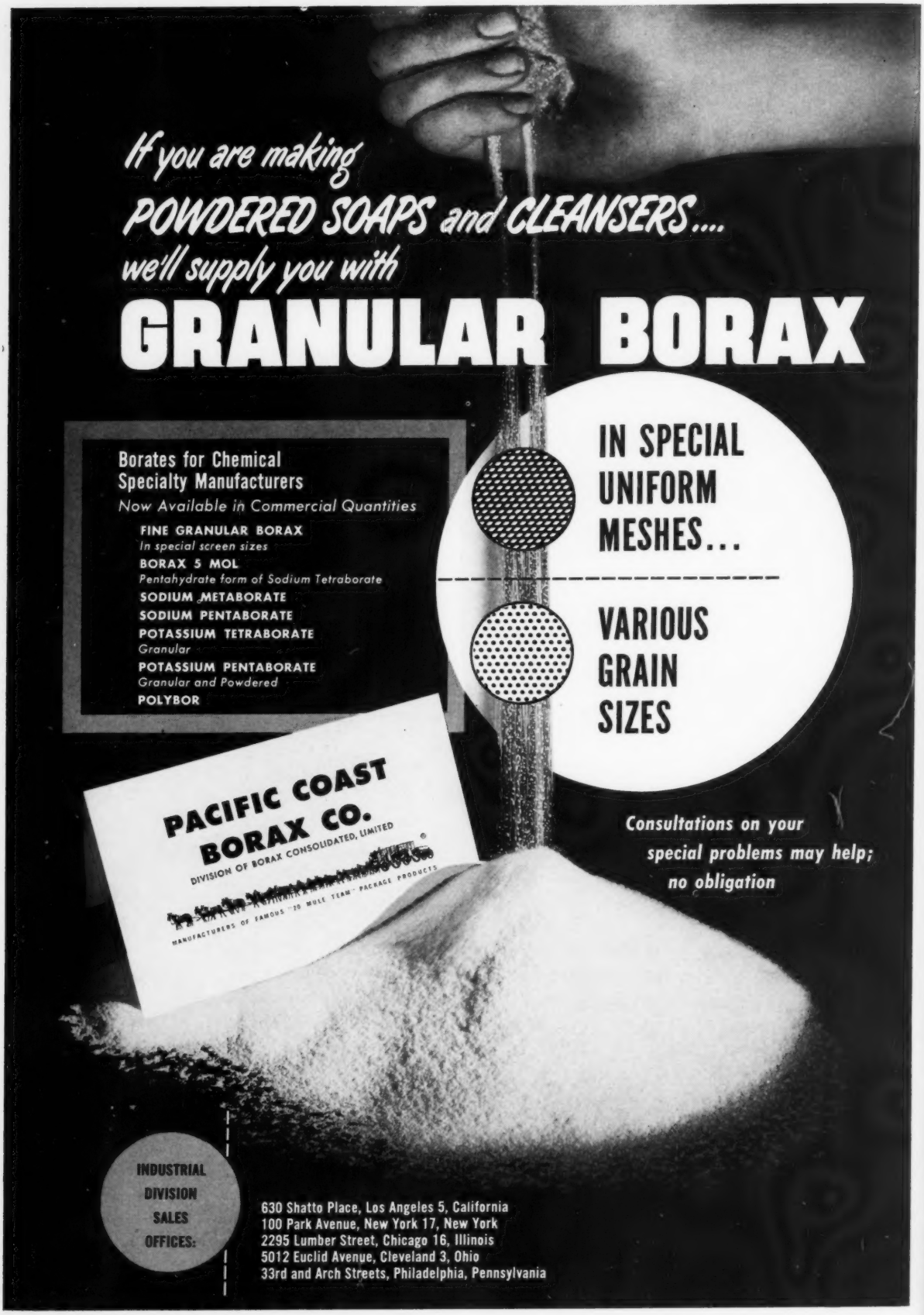
Please send me your bulletin on Sulfamic Acid and information on its application in cleaning.

Name_____ Position_____

Firm_____

Address_____

City_____ State_____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"OF THE FIRST WATER"

NEOLENE 400

INTERMEDIATE FOR SYNTHETIC DETERGENTS

There's good reason for the rapidly increasing use of NEOLENE 400 by the world's largest processors of synthetic detergents—and by other users everywhere. NEOLENE 400 has established itself on the basis of *superior quality* . . . in stability, in uniformity and purity . . . in *performance* of the finished sulfonate. Look to Continental for outstanding products processed from NEOLENE 400. Among these are:

DETERGENT SLURRY—for formulation—spray and drum drying.

SYNTHETIC OIL-SOLUBLE SULFONATES—various forms for many applications.

SYNTHETIC DETERGENTS—drum or spray dried.

Samples and technical information on NEOLENE 400 and a wide range of other Conoco Petrochemicals furnished by request on your letterhead.

Petrochemical know-how from the ground up!

CONTINENTAL OIL COMPANY

PETROCHEMICAL DEPARTMENT, DIVISION A-9

630 Fifth Avenue, New York 20, N. Y. 1353 No. North Branch Street, Chicago, Ill.
Export: Airco Company International, 60 East 42nd Street, New York 17, N. Y.

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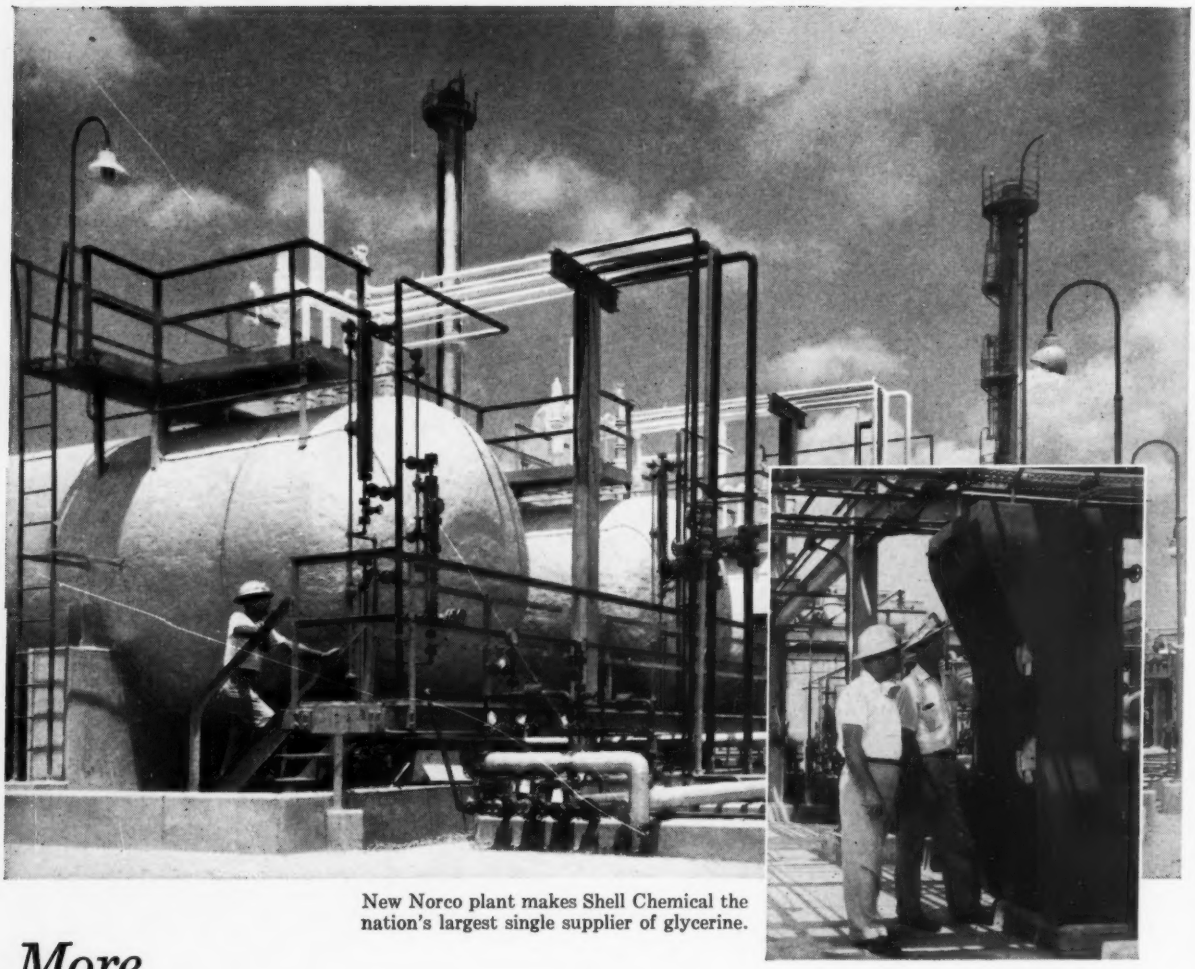

New Norco plant makes Shell Chemical the nation's largest single supplier of glycerine.

More Glycerine *on stream!*

Seven years ago, Shell Chemical startled industry with this news . . . high-purity *synthetic* glycerine, produced from petroleum, in commercial quantities!

Now . . . more good news for glycerine buyers! A new plant (Norco, Louisiana) is now on stream, adding further to the supply of uniform, high-purity glycerine.

And looking toward the future, Shell Chemical is building a plant for *an entirely new synthetic glycerine process,* using hydrogen peroxide and acrolein as raw materials.

Whether your glycerine requirements are small or large . . . a drum or a tank car . . . Shell's key storage facilities assure prompt delivery. Write for delivery information and specifications.

SHELL CHEMICAL CORPORATION

CHEMICAL PARTNER OF INDUSTRY AND AGRICULTURE

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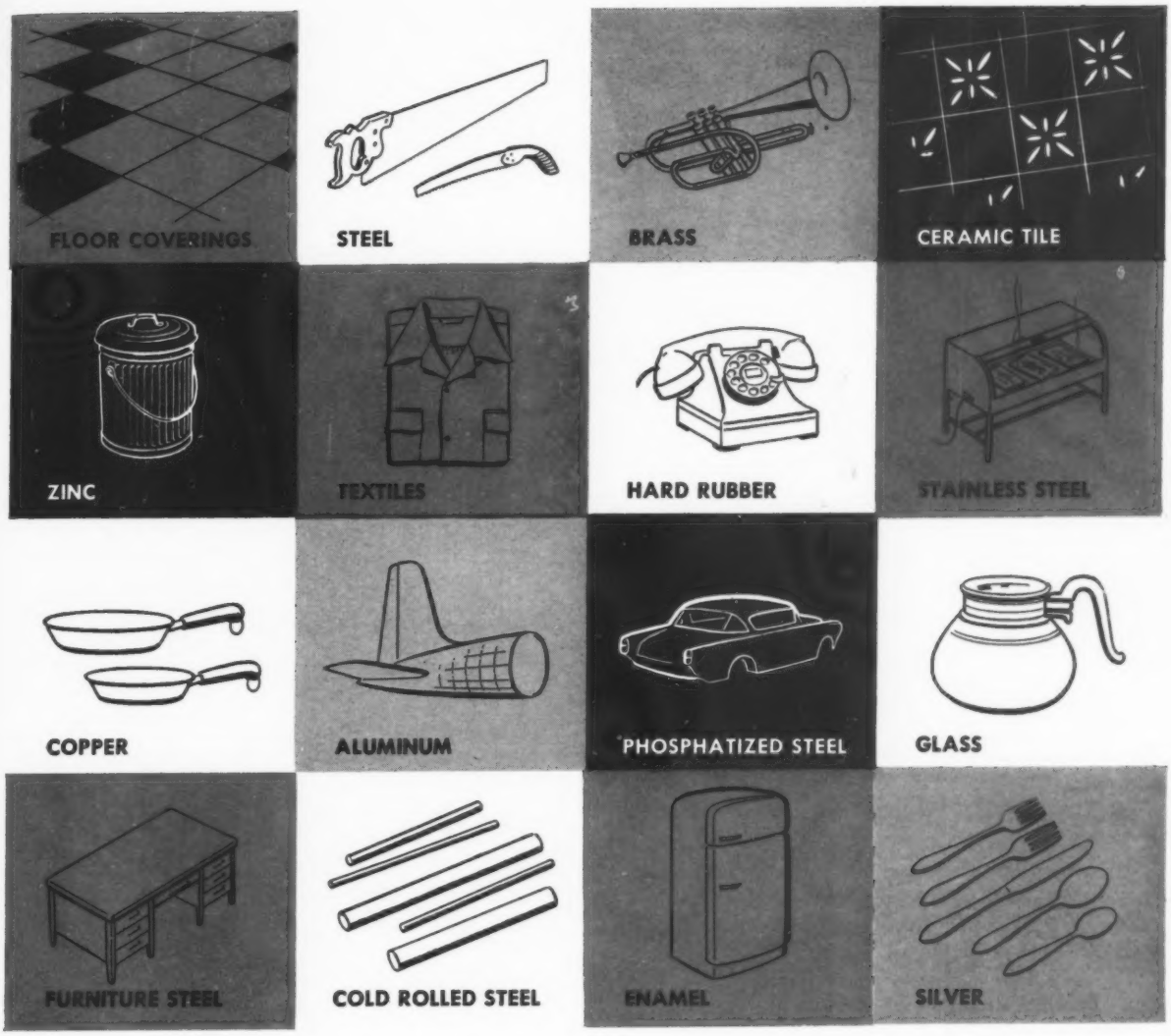
IN CANADA: Chemical Division, Shell Oil Company of Canada, Limited • Montreal • Toronto • Vancouver



TRITON X-100 cleans them all!

No matter what's to be cleaned or what soil removed, TRITON X-100 is the one surface-active agent that combines the properties needed for effective cleansing.

This non-ionic surfactant not only offers outstanding detergency, but it also provides thorough wetting, disperses solids, and emulsifies oil and grease. Furthermore, TRITON X-100 retains its effectiveness in acid solutions or in hard water.

TRITON X-100 can be used in liquid detergents or sprayed on many salts and alkalies to give detergent powders. It's compatible with alkaline scouring agents, and mild oxidizing and reducing agents, organic solvents, and cation and anion-active agents.

Investigate the possibility of using versatile TRITON X-100 in your own formulas. See your Rohm & Haas representative, or write today for technical data and formulation suggestions.

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AMERICA'S LEADING SYNTHETIC DETERGENT

Put Extra Profit in Your Product with

Nacconol® DB

PHOTOMICROGRAPH
SHOWING ENLARGEMENT 100X

In these highly competitive days it takes a better product to make a better profit. For your detergent mixtures, you can't find a better base than Nacconol DB because:

NACCONOL DB does not break down in mechanical mixing
NACCONOL DB is dust free
NACCONOL DB gives desired bulk to mixtures
NACCONOL DB keeps mixtures free flowing
NACCONOL DB is dependably uniform

See for yourself how NACCONOL DB can add sales appeal to your product by sending for your sample today. Write, wire or phone our nearest office.

Nacconol

NATIONAL ANILINE DIVISION
ALLIED CHEMICAL & DYE CORPORATION
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"RINSE-ADE", a CMC-based product of Frontier Alkali Corp., Buffalo, N.Y., keeps soil in suspension, rinses fast, and saves hot water.

in Commercial Laundry Preparations
THE KEY IS CMC

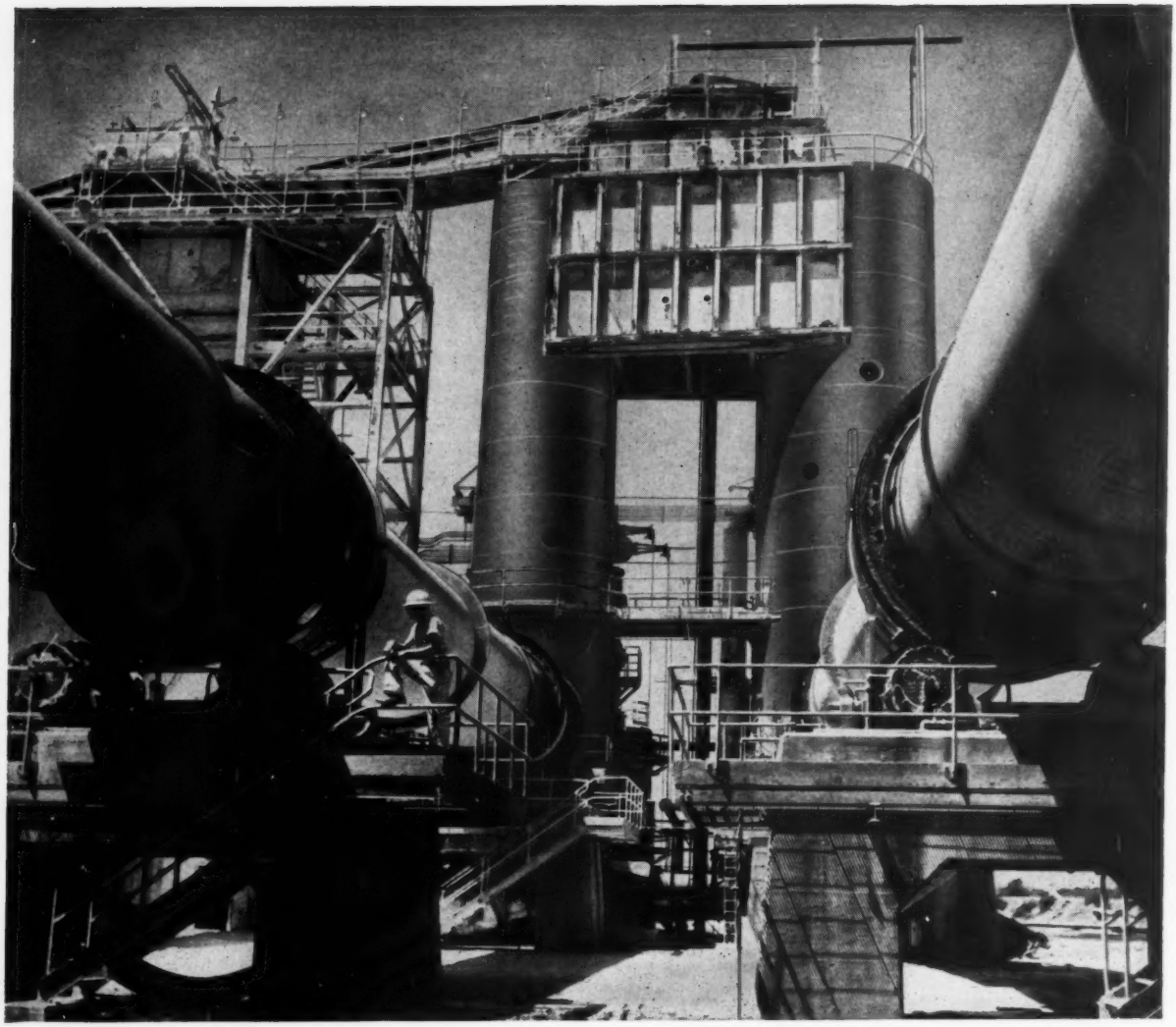
Commercial laundry preparations, as well as detergents and soap for home use, get clothes whiter, faster when they include Hercules® CMC in the formulation.

The exceptional soil-suspending properties of CMC insure that dirt particles go down the drain with the rinse water and are never redeposited on the clothes. And CMC-based preparations are economical to use. For example, directions for the use of "Rinse-Ade" call for only 6 ounces per 100 pounds of clothes.

Commercial laundries and leading manufacturers of cleaning agents everywhere are discovering the advantages of economical CMC. Prove for yourself what CMC can do. Technical information and a testing sample are available on request.

Virginia Cellulose Department
HERCULES POWDER COMPANY
INCORPORATED
961 Market St., Wilmington 99, Del.

VC58-9



Mathieson Soda Ash: *there's always an 'r' in purity*

Purity knows no season in the production of Mathieson soda ash; oyster *shells* are available every month of the year. Here at Lake Charles, La., shells are the starting point of the ammonia-soda process. Taken from the Gulf by the thousands of tons, they are washed and placed in huge storage piles, then transferred as needed to the towering silos shown above. From the silos they are fed into large rotary kilns where carbon dioxide and lime of extremely high purity are obtained.

At *all* Mathieson plants, attention to raw materials helps assure the quality of products. In addition, buyers have the protection of multi-plant production facilities... 2 soda ash plants, 6 caustic soda plants, 5 chlorine plants, 7 sulphuric acid plants, 3 ammonia plants... plus practical technical assistance with materials handling and application problems. When planning current or future chemical requirements, be sure to call on Olin Mathieson. Perhaps you can buy to better advantage from one of America's largest, most diversified producers of basic industrial chemicals.

MATHIESON CHEMICALS
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INDUSTRIAL CHEMICALS DIVISION • BALTIMORE 3, MD.

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CAUSTIC SODA • SODA ASH • CHLORINE • SULPHURIC ACID • SULPHUR • AMMONIA • NITRATE OF SODA • BICARBONATE OF SODA • CARBON DIOXIDE • SODIUM CHLORITE • CALCIUM HYPOCHLORITE
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Mr. fatty acid says...

"for clear liquid soaps that really lather and give uniform color batch after batch . . . use

ADM fatty acids"

FATTY ACID TYPE AND GRADE	METALLIC SOAPS	LIQUID SOAPS	WAXES AND POLISHES	INSECTICIDES AND DISINFECTANTS	LUBRICATING GREASES	COSMETICS	PHARMACEUTICAL
COCONUT							
Double-Distilled		X		X		X	
LINSEED							
Regular	X	X		X			
SM-500	X	X		X			
SM-600	X	X		X			
Essential Unsaturated Free Fatty Acids							X
SOYA							
Regular	X	X		X			
RO-4	X	X		X			
RO-10	X	X	X	X	X		
RO-11S	X			X			
MIXED VEGETABLE							
RO-8	X	X	X	X	X		
CORN-SOYA							
Double-Distilled		X	X	X	X		
CORN							
Double-Distilled		X	X	X	X		
COTTONSEED							
Double-Distilled	X		X	X	X		

Uniformity of quality is a special problem in buying soap-making fatty acids. For even slight variations in raw materials and processing can impair the purity of acids . . . their uniformity, color and saponification characteristics.

As scores of users testify, you can be doubly sure of *uniform* quality year after year when you specify ADM Fatty Acids. The reasons include strict quality control inspection at every production stage.

ADM Fatty Acids make liquid soaps with superb clarity and minimum content of unsaponifiables at every price level.

ADM's RO-10 Soya and D-D Corn fatty acids are well known for their mildness in contact with the skin. For checking samples and technical data mail the coupon below.

For clearer liquid soap

ADM fatty acids

Mail this coupon today.

ARCHER-DANIELS-MIDLAND COMPANY
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..... Please send samples of the following ADM Fatty Acid for my evaluation_____

.... Please send Technical Bulletin.

Name_____

Title_____

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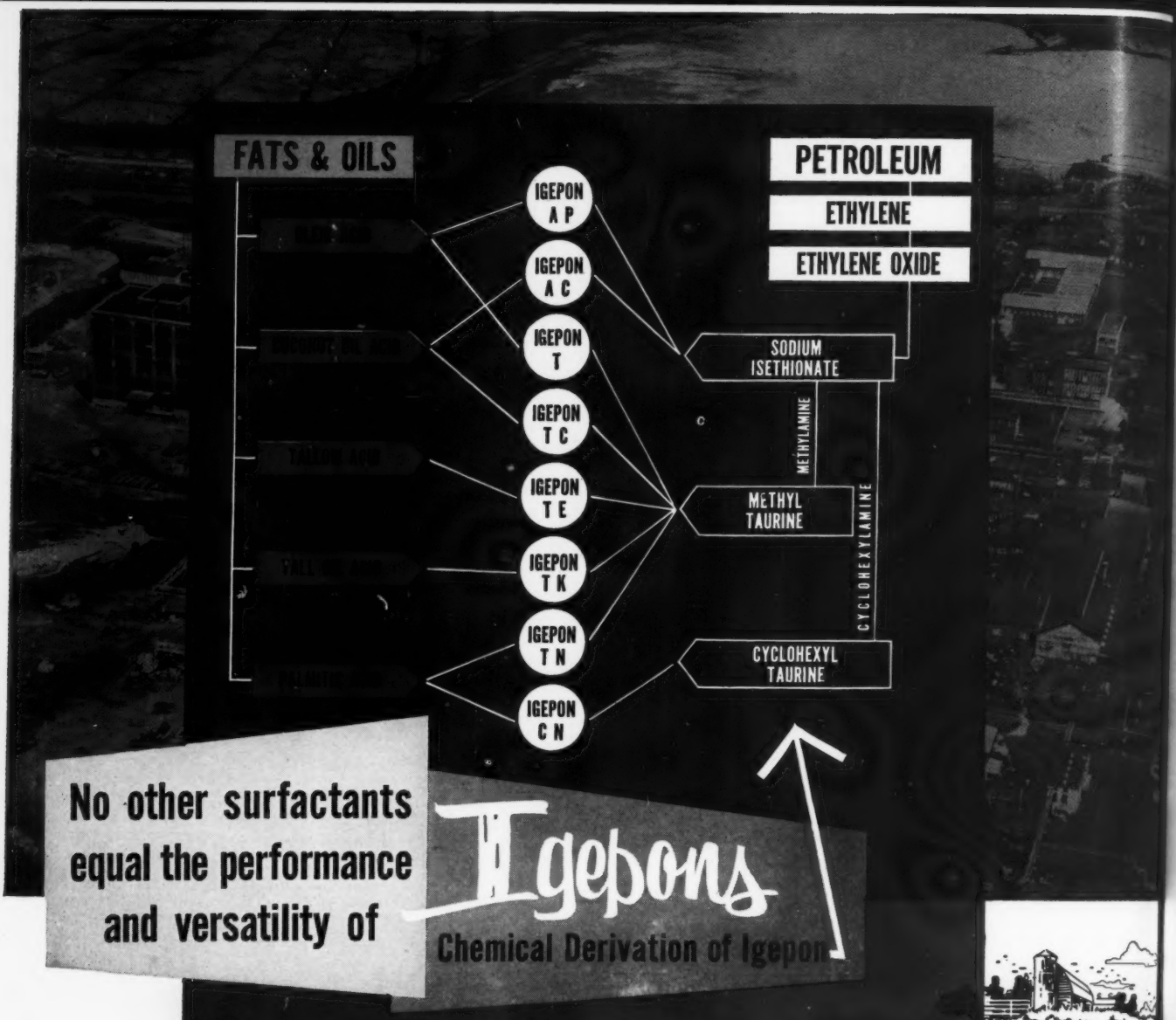
City_____ Zone_____ State_____

Archer-Daniels-Midland company

Archer QUALITY



No other surfactants equal the performance and versatility of Igepons

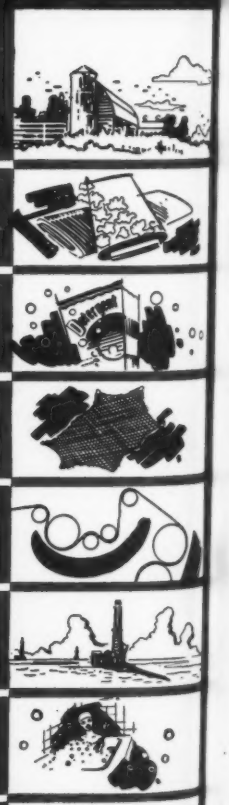
Chemical Derivation of Igepon

There are 8 basic Igepons, each supplied in various concentrations and physical forms, and there is one to do the job for you.

Igepons are important in many industries, including cosmetics, textiles, detergents, paper, leather, agricultural and industrial chemicals, to improve a product or process. In some cases, an Igepon is selected because of its high or low foaming characteristics, its unique dispersing or emulsifying qualities, or for its excellent detergency. In others, an Igepon is selected for its wetting power, chemical stability or physical properties.

So whether you're looking for a surfactant in an agricultural wettable powder, a base for laundering detergents, or a bubble bath formulation, check with us on the correct Igepon to use in your particular application.

Write us today for information and samples of these unique, versatile surfactants.



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ANTARA CHEMICALS

A DIVISION OF GENERAL ANILINE & FILM CORPORATION

435 HUDSON STREET · NEW YORK 14, NEW YORK

6 MONTHS IN STORAGE
. . . NO PEROXIDE BUILD-UP!

TWO different lots of Swift's DP Stearic Acid were put under storage conditions for six months. Here is how each lot tested at the end of that time:

	LOT 1576 SWIFT'S	LOT 1633 SWIFT'S
Peroxide Value (Original)	NIL	NIL
Peroxide Value (6 Months Later)	NIL	NIL

SWIFT'S STEARIC ACID
for lasting product freshness

Peroxide value is a measure of oxidation. Where stearic acid is involved, oxidation is an enemy to the shelf life of your product. The results of the test shown above were important to us for two reasons and should be of equal interest to *you* for the same reasons:

(1) *Swift's Double Pressed Stearic Acid resists oxidation* over extended storage. It is shipped fresh to *stay* fresh and to help insure the stability of your product.

(2) Results of a ten week accelerated storage test carried out under identical conditions using fresh samples of DP stearic acid produced by five manufacturers showed the Swift's product to have the *lightest color and greatest storage stability of all samples tested.*

"Application" purity is no accident with Swift's Stearic Acids. Only the better suited grades of raw materials are selected from the wide variety available to us for processing in a unique low temperature solvent process. With it, impurities and color bodies are selectively extracted. Low ash, light color, bland odor, and true product freshness and stability are the result.

Write for details today—and remember . . .
ONE TRIAL IS BETTER THAN A THOUSAND CLAIMS

Stearic Acid • Monoglycerides • Oleic Acid (Red Oil) • Emulsifiers • Coconut Fatty Acid • Spermaceti U.S.P. • Hydrogenated Glycerides • Animal Fatty Acids • Sulfonated Oils • Hydrogenated Fatty Acids • Vegetable Fatty Acids

Swift
1855 CENTENNIAL 1955
TO SERVE YOUR INDUSTRY BETTER

USE THIS COUPON FOR FURTHER INFORMATION

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Hammond, Indiana

Please send further information on Swift's Stearic Acid for use in:

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_____ ☐ Send Industrial Oil Bulletin.

Name _____ *Title* _____

Company _____

Address _____

City _____ *Zone* ____ *State* _____

For TOUGH Detergent Problems...

General Chemical ANHYDROUS SODIUM METASILICATE

Look at these advantages!

Ideal Particle Size

A carefully-sized material made to meet exacting handling and formulating needs.

Compatible

Ideal for formulating with TSP, STPP, other phosphate builders.

Strongly Alkaline

An excellent general heavy-duty detergent. Extremely effective in inhibiting corrosion on aluminum when used in alkaline mixtures.

Free-Flowing

Both bags and drums have special heavy-duty asphalt barriers to protect its free-flowing properties and prevent moisture pickup during shipment and storage.

Clear Solutions

Dissolves readily to give clear, sediment-free solutions.

Consistent High Quality

Extremely low in iron, other undesirable impurities.

Phone or write the nearest General Chemical office listed below for full information.

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Basic Chemicals for American Industry

The perfume in a soap is there for but one purpose . . . . *to increase consumer appeal.* To accomplish this it must provide a fragrance which appeals to the market . . . it must influence the buyer at point of purchase, and last delightfully throughout the total use period.

The able soap perfumers of van Ameringen-Haebler, Inc. know soaps and know perfumes. They can give you soap perfumes that are technically right, and appealingly right.

VAN AMERINGEN–HAEBLER, INC.

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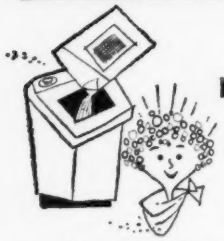
STEPAN AMIDES



LIPA

A 100% active, fatty acid alkylolamide, nonionic in character. It is a light ivory color, waxy solid, with a mild, pleasant odor. LIPA is a superb foam stabilizer and also a good auxiliary detergent when used with fatty alcohol sulfates and/or alkyl aryl sulfonates. It is recommended for use in heavy duty laundry detergents, creme shampoos, rug shampoos and detergent hand cleaners.

LDA

A special 100% active fatty acid alkylolamide (a diethanolamide condensate with a very pure grade lauric acid). It is nonionic in character. LDA is a splendid foam stabilizer for liquid dishwashing detergents. It is also an excellent wetting, foaming and thickening agent as well as a good detergent and emulsifier. Recommended too, for shampoos, hand cleaners, and for use in hard surface cleaners.

T6-A T6-B

Both products are alkanolamides, 100% active and nonionic in character. T6-A is recommended for use in bubble bath preparations for its fine foam stabilizing in the presence of soap. T6-B is recommended for use in clear and lotion type shampoos as a good thickening agent and auxiliary detergent with some emollient action.

HDA-7

A heavy duty alkanolamide with a built-in coupling agent which permits a very high phosphate tolerance (as much as 11% on an anhydrous basis). Here is the product to investigate if you are looking for a heavy duty all-purpose hard surface cleaner with a lot of punch. Does an excellent job of wax stripping without harmful effect on floor.

ADT

A low sudsing, special, 100% active fatty acid alkanolamide. It is nonionic in character. ADT is highly recommended for use in formulating liquid scrub soaps. Among its advantages, it can eliminate the use of a coupling agent, has high viscosity and performs unusually well in hard water.

S-86

A 100% active alkanolamide. Essentially nonionic in character with good alkaline stability. Specially recommended for use in textile scouring, dye leveling and similar applications. S-86 provides good detergency for both cotton and wool. S-86, in addition, also offers some advantages for use as a stabilizer and thickener.

Write for Complete Information

STEPAN CHEMICAL COMPANY

20 North Wacker Drive, Chicago 6, Illinois

Telephone: CEntral 6-5511

Dimethyl Sulfoxide • Fatty Alcohol Sulfates • Bulk Liquid Detergents • Sulfonated Oils • Amides • Foam Stabilizers • Alkylphenol Polyalkoxy Sulfates

Available for Immediate Delivery!

SOLVAY

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Flake · Small Flake · Solid

CAUSTIC POTASH

WHITE in color!

LOW in turbidity!

LOW in Iron!

See For Yourself why SOLVAY Caustic Potash is *tops in value!* Send for FREE test samples and make your own comparison tests with the brand you're now using.

SOLVAY's industry-wise Technical Service, with *separate sections* for *different industries,* is always ready to assist you in the development of a new or improved process . . . suggest better methods of using, storing and handling SOLVAY Caustic Potash.

Write today for test samples and free literature.

ALSO AVAILABLE IN LIQUID FORM:
49-50% in Tank Cars
45% in Liquid Drums

MAIL COUPON NOW FOR COMPLETE INFORMATION

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Soda Ash • Snowflake® Crystals • Potassium Carbonate
Calcium Chloride • Sodium Bicarbonate • Caustic Soda
Ammonium Bicarbonate • Caustic Potash • Chloroform
Cleaning Compounds • Ammonium Chloride • Chlorine
Sodium Nitrite • Methylene Chloride • Methyl Chloride
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Monochlorobenzene • Para-dichlorobenzene

Allied Chemical

SOLVAY PROCESS DIVISION
ALLIED CHEMICAL & DYE CORPORATION
61 Broadway, New York 6, N. Y.

Gentlemen: Please send me the following at NO COST OR OBLIGATION:

Samples: ☐ Solid ☐ Flake ☐ Small Flake ☐ Liquid

☐ Have your Technical Service contact me.

☐ FREE BOOK—"Caustic Potash and Potassium Carbonate."

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Company_____

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Address_____

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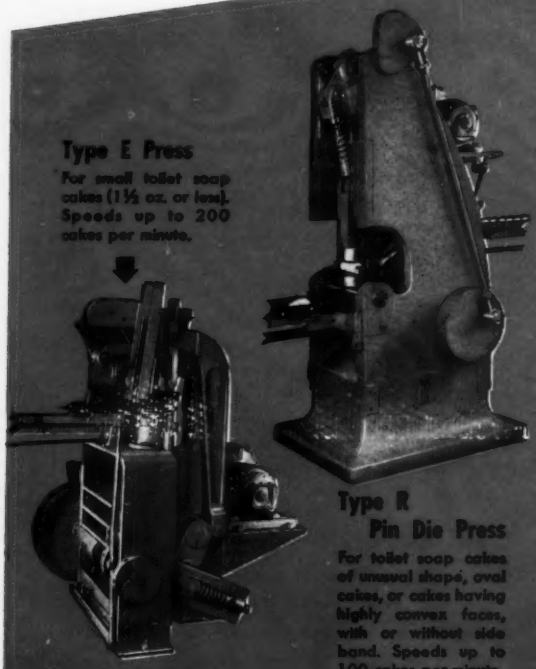
JONES *Specialists*

. . . in Automatic Soap Presses

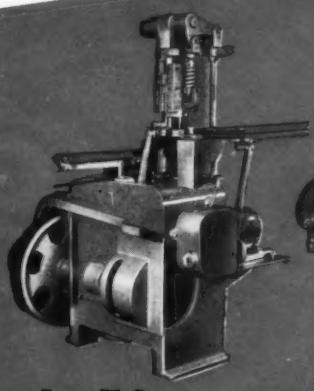
JONES PRESSES, with their exclusive, patented *toggle motion,* have become the standard throughout the world wherever high production, high quality, and perfection of finish are paramount considerations. Standard Jones Presses illustrated here meet all soap pressing requirements. A Jones Toggle Operated Soap Press will improve the appearance of your product, increase your production, reduce your costs. Write today for complete information.

Type K Simplex Press
For toilet or laundry soap cakes of any shape (except highly convex cakes) with side band. Speeds of 120-140 cakes per minute.

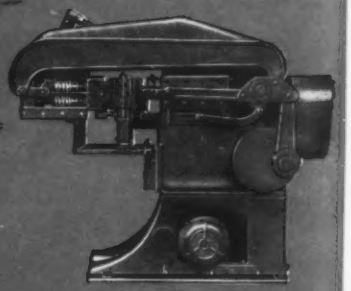


Type E Press
For small toilet soap cakes (1½ oz. or less). Speeds up to 200 cakes per minute.

Type R Pin Die Press
For toilet soap cakes of unusual shape, oval cakes, or cakes having highly convex faces, with or without side band. Speeds up to 100 cakes per minute.



Type ET Press
For small toilet soap cakes with side band. Speeds up to 120 cakes per minute.



Type K Duplex Press
Applications same as Type K Simplex. Presses two cakes simultaneously. Speeds up to 250 cakes per minute.

Type F Press
For large toilet or laundry soap cakes. Available in Simplex or Duplex Models, pressing one or two cakes per stroke.

R. A. JONES & COMPANY, INC.
Cartoning Machines — Soap Presses

P. O. BOX 485
CINCINNATI, OHIO

. . . in brief

LOOP HOLE . . . . If there's a loop hole anywhere, leave it to the chiseler to find it. Thus, it seems some of the chiselers have found the loop hole in sudsless detergents. Because they do not suds or suds only slightly, the average sudsless detergent is an unknown quantity to the average user. Thus a standard sudsless product can be cut down sharply in active ingredient and nobody knows the difference. Where the lack of foam of a soap or sudsing detergent might arouse suspicion, there is no similar indicator for the sudsless product. A standard sudsless material, highly adulterated and sold at a reduced price might look really attractive to the unknowing buyer.

Once again, it would seem that the buyer is on safe ground only in purchasing a known brand in original containers or in buying from a source in which he has complete confidence. The bargain hunter well could be burned, for as we said before, if there's a loop hole the chiseler will find it. As a matter of fact, he already has found it.

•

BUSINESS . . . . Business generally has been pretty good for the first half of 1955 and particularly through the summer months. Reports indicate that the demand for soaps, detergents, janitor supplies and the like in the industrial field has been good. As far as the household market is concerned, we judge from what we hear that sales have been up to par or a little higher at least for the first six months of the year.

What keeps business booming along at a fast pace, we don't know, except that industrial activity is at a very high level and payrolls generally are at an all-time high. Not only people individually, but institutions, hotels, factories, seem to be using more cleaning and sanitary materials. Could they be stockpiling? We doubt it. Supplies of all materials seem to be in ample supply for quick delivery. They just must be using the stuff.

Now, for the first time in many a moon, we hear reports that price increases on soap, detergents and allied materials are in the offing. Higher costs, more active demand, seem to be the reasons. Well, we wouldn't be a bit surprised that such advances might be a little bit overdue.

•

CREDIT . . . . Well, business may be good and sales up, but what about credit? We hear rumblings that some people are not paying their bills too rapidly, that accounts receivable in many companies are at levels which are worrying credit men. Brisk demand and slow pay just don't seem to fit together too well in our book. And we have particular reference to business credit, not the retail variety which in our own reactionary way we have felt has been overextended for a year or more.

Now, it so happens that soaps, cleansers, sanitary supplies and what not are bought by the smallest to the largest organizations. Everybody buys 'em which means that the credit picture represents a very good cross section of industry generally. We sense that many organizations, especially smaller ones, taking advantage of generally easy credit, may be overextended. While things are booming along, this is not too serious, but if they slow down, even temporarily, the reaction could be fast and not too pleasant.

Quietly, the Federal Reserve has been putting a damper on credit, aiming to prevent

ALKYL ARYL SODIUM SULPHONATES
based on tetra propylene polymer

NANSA* brand

* **NANSA H. S. FLAKE**
80% dodecyl benzene sodium sulphonate
* **NANSA S. POWDER**
40% spray dried dodecyl benzene sodium sulphonate
* **NANSA LIQUID**
built alkyl aryl sodium sulphonate liquid
* **NANSA U. C. POWDER**
bead type totally spray dried synthetic detergents containing molecularly condensed phosphates, carboxy-methyl-cellulose, silicates, foam builders, etc.

HIGHER ALIPHATIC ALCOHOLS
by high pressure hydrogenation
LAURYL ALCOHOL and homologues
by vacuum fractionation
LAUREX BRAND

SODIUM LAURYL SULPHATE
spray dried powder to U.S.P. & B.P. specification
TRIETHANOLAMINE LAURYL SULPHATE
for shampoos, toilet preparations and liquid cleansers
SODIUM LAURYL SULPHATE NEEDLES
non-dusty, for toothpastes, cream shampoos and industrial use
EMPICOL BRAND

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emulsifiers, surface tension modifiers, coupling agents
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Manufacturers of

ORGANIC DIVISION: fatty alcohol sulphates (EMPICOLS), emulsifiers (EMPILANS), self-emulsifying waxes (EMPIWAXES), alkyl aryl sulphonates (NANSAS) and other detergent bases, additives and emulsifiers in powder, paste and liquid forms.

INORGANIC DIVISION: phosphoric acid and complex phosphates.

overextension, but at the same time trying to avoid interfering with the pace of industrial demand and employment. It means that some of our top financial brass could be worried a little. Maybe that's the cue for individual businesses to try just a bit harder to bring delinquent accounts up to date.

●

WAX TESTS . . . . The need for tests for basic waxes has been apparent for some time. There are specifications, including those of the American Wax Importers and the Toilet Goods Association for carnauba and other waxes. But there are no universally accepted test procedures. Much work has been done on wax methods by the Chemical Specialties Manufacturers Association and the American Society for Testing Materials, and they have come up with three tests, but they are still in the tentative stage.

With a view to crystallizing the situation, Melvin Fuld, president of CSMA, and chairman of a sub-committee of D-21-ASTM, plans to deliver a paper at the next annual meeting in December, comparing these tentative tests with those now in use. To aid in this tabulation, he has asked all wax producers, importers and distributors to supply him with figures on acid and saponification numbers and hydrocarbon content of all their waxes. He urges wax suppliers to have their waxes run by the new tests, ASTM-54T, and send him the results. We too urge full cooperation with Mr. Fuld in this much needed work. Full details are included in a letter from Mr. Fuld published on "as the reader sees it" page immediately following.

●

MOTHS . . . . The annual bill for damage by clothes moths and carpet beetles has been variously estimated at up to a half-billion dollars and higher. Frankly, we don't believe that anybody knows the exact figure, but we do know it's high, very high. And a great portion of this damage is wholly unnecessary. Moths can be controlled readily and easily, and there are plenty of products on the market to do the job. This is why an educational publicity campaign designed to cut down moth damage is a natural,—a natural for the housewife whose clothes, furs, and blankets are saved, and a natural for the manufacturer whose products are used.

The campaign plans of the Moth Control Committee of the Chemical Specialties Manufacturers Association, temporarily in a lull for the past year, now are getting under way again. The Committee is going to need $50,000 to do the job for the first year. If you make or market a moth product, or a raw material, you will be asked to contribute. It's good work, a job which can double or triple the sale of moth products in a few years. The best company names in the field are already associated with the campaign. If you make a moth product, your help will mean money in your own pocket.

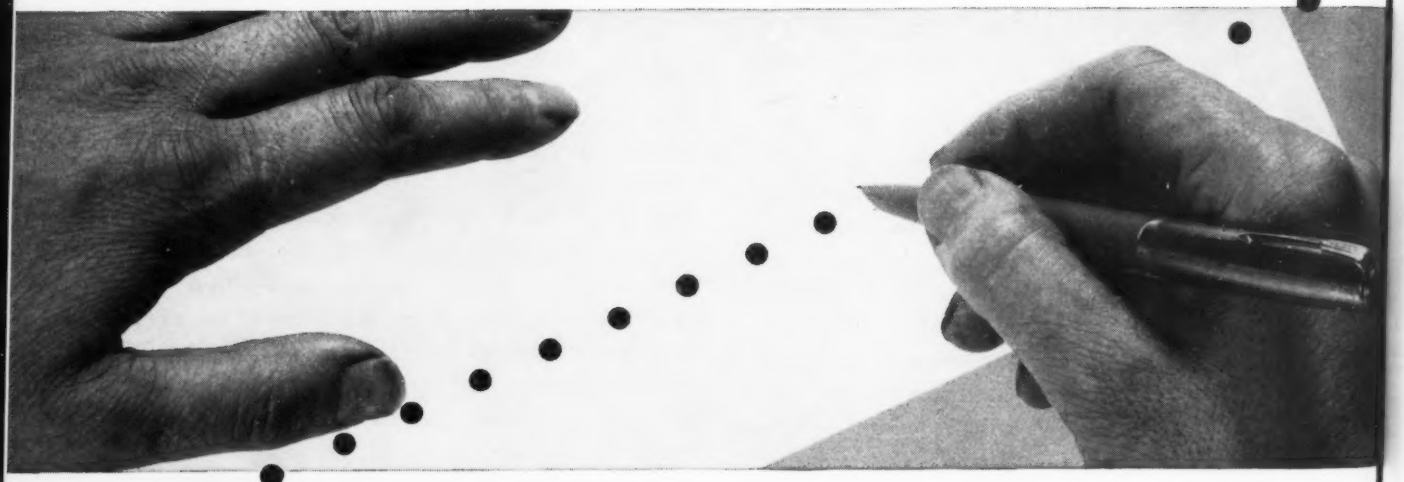
●

SKIN DISEASE . . . . The Soap Association has taken a step toward solving the costly problem of industrial skin disease. The Association has just announced publication of "The Prevention of Occupational Skin Diseases," a 50-page booklet which was written by Dr. Louis Schwartz, for many years one of the world's foremost authorities on occupational diseases of the skin. Technical advice was provided by a committee of Soap Association company representatives marketing skin cleansers.

As part of its long-time promotion of cleanliness, the Association has extended its efforts as a public service in the field of industrial health with the preparation and distribution of this very instructive booklet, which has been written in laymen's language. It is logical that the soap and detergent industry should support such an effort because of the vital role cleanliness, both of person and environment, plays in combatting occupational skin disorders. At the same time, other organizations in the field of sanitation and its products might well aid in seeing that the booklet gets the widest possible distribution. The reasons of altruism and enlightened business interest for this hardly need explaining.

Industrial physicians and health advisors should find the booklet a source of sound information on conditions that cause skin troubles and an aid in adopting preventive measures which supplement their service and advice in reducing the toll taken by industrial dermatoses.

Before you sign your new contract for caustic soda



Right now is the time—before you make your new contract commitments—to carefully review the form of Caustic Soda you plan to buy.

You may be able to realize savings, for example, by converting to 50% Liquid Caustic—

IF you buy *solid caustic* and your transportation charge is less than $1.18 per 100 lbs., or

IF you buy *flake caustic* and your transportation charge is less than $1.62 per 100 lbs.

On the other hand, a number of 50% Caustic Soda users, depending upon volume consumed and location, have found it highly profitable to switch to 73% concentration.

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as the reader sees it...

Aerosol Regulations

Editor:

The article entitled "Aerosol Regulations . . .," which appeared beginning on page 155 of the August issue of *Soap & Chemical Specialties,* was of much interest to us. It is indeed helpful to have this complete summary of the complex regulations governing pressure packages.

Your Simplified Table of ICC Regulations on page 167 is of particular interest. We would appreciate receiving several reprints of this table if they are available. Please let us know if we can obtain reprints of this page or of the whole article, if you plan to make it available as a special reprint.

Morris J. Root,
Technical Director,
G. Barr & Co.,
Chicago

* * * *

To Mr. Root and others who may be interested, reprints of the whole article are now available from the Chemical Specialties Manufacturers Assn., 50 E. 41st St., New York 17.—Ed.

—★—

Wax Testing

Editor:

The need for wax testing, both raw material and finished product, was recognized by suppliers of raw materials, manufacturers of finished wax products and general consumer buyers by the establishment of Committee D 21-ASTM. The problem of raw material testing was assigned to Subcommittee II of which I am chairman. The need for uniform tests was early recognized by the subcommittee.

The American Wax Importers have established their own specifications for carnauba waxes. These specifications were approved by that group. However, methods of test are still needed. While this group has adopted some tests, neither CSMA, ASTM or the industry as a whole has accepted these tests. Work has been going on in both CSMA and ASTM, but as yet we in the industry have only three tests which are in a tentative status.

ASTM D-21, Sub II on Raw Materials, has issued two new tentative methods of test—Tentative Method of Test for Acid Number (Empirical) of Natural Waxes, D 1386-55T, and Tentative Method of Test for Saponification Number (Empirical) of Natural Wax, D 1387-55T.

I am anxious to obtain the values of individual wax producers, importers or distributors for (2) acid number, (b) saponification number, (c) paraffinic content. In December at the annual CSMA meeting, I plan to deliver a paper before the Wax Division on these test methods and how they compare with those now in use. I have sent a letter to all firms listed in the 1955 *Soap Blue Book* urging them to have these tests run by the new procedures and to send the results to me for tabulation, but whether I have contacted all firms or not, I urge them to cooperate in this work and have their waxes tested by the new methods as per ASTM-54T.

The results will be tabulated and published in this magazine as soon after delivery of the paper as possible. This is a step forward in the publication of standardized data. Wax suppliers should be sure their names are on the tests when sent in.

The new procedures are being used by a number of our commercial laboratories. C. S. Kimball of Foster D. Snell, Inc., says: "These tests have been used by us for some time. We find them workable and give slightly different results than other tests previously used."

Melvin Fuld, *President,*
Fuld Brothers, Inc.,
Baltimore.

Whether you received a letter from Mr. Fuld or not, all suppliers of basic waxes are urged to have their waxes tested by the new methods and to send the resultant figures to Mr. Fuld. If he is to use the data as part of his paper for December delivery, this information should be sent Mr. Fuld at the earliest possible moment.—Ed.

—★—

Steel Drums

Editor:

. . . I believe a great deal of animosity between reconditioned drum sources and users, on one hand, and new drum manufacturers on the other, could have been

(*Turn to Page* 195)

"It's a new idea in printed soap wrappers. The ink rubs off and makes people buy 75 percent more soap."

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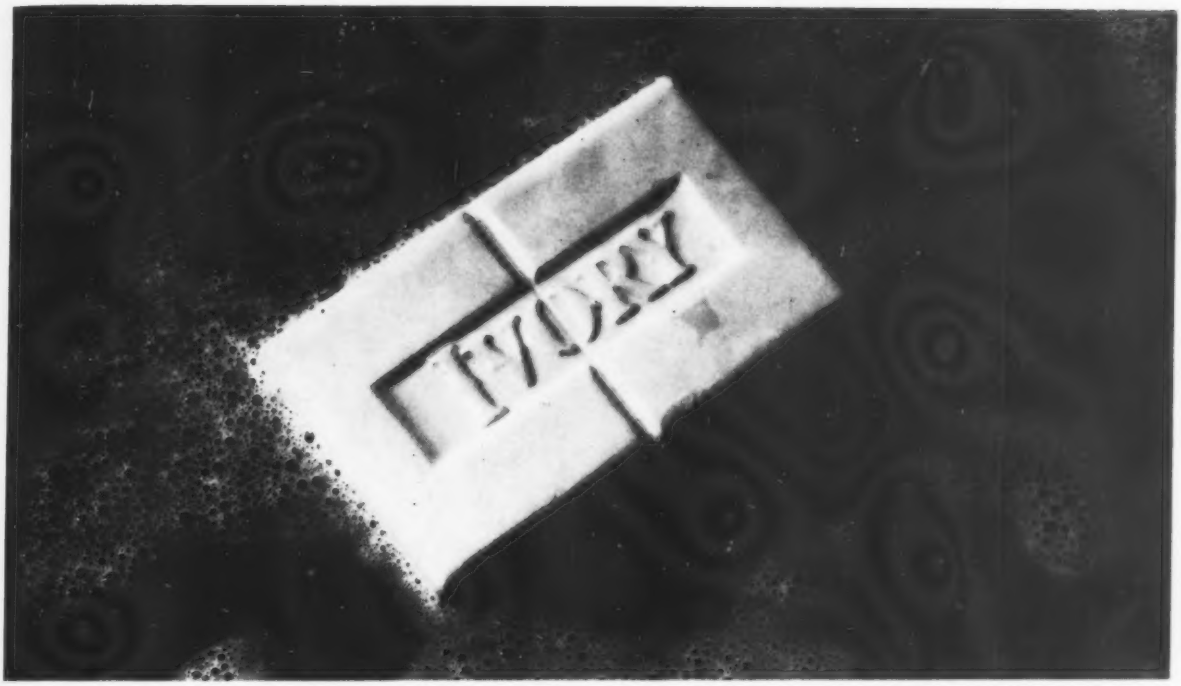


Biggest selling and best known floating soap of them all: Procter & Gamble Company's "Ivory" soap. Literally billions of bars of "Ivory" have been sold since its introduction 76 years ago. Originally, the soap did not float.

FLOATING SOAPS

By F. V. Wells*

AT the time of this writing, floating soap is not made in Britain by any of the major soaperies. One brand is produced on a small scale for local consumption. The Lever group tried unsuccessfully to popularize its "Swan" brand floating toilet soap in the pre-war years, and another firm made a similarly serious but unavailing attempt to introduce a floating soap about five years ago.

In France, on the other hand, such soaps continue to flourish as luxuries on a limited but appreciable scale; a few of the smaller soap concerns, including at least two in the Paris region, evidently make a profit out of them. Floating soaps are also popular, I am told, in other European countries; and several Indian and Far Eastern firms have sought technical advice with a view to producing them. Practically all of the important development work on floating soaps to date has been carried out in the U. S. A., with German technologists probably taking second place in this field of technical achievement.

What are the advantages, if any, of soap that will float on water? If I were hypercritical, I might be tempted to say "none": that any supposed advantages are largely imaginary and are considerably outweighed by the disadvantages. But I doubt whether that would, in fact, be correct. To most children, for example, there is something very satisfactory about a cake of soap that floats like a boat and won't sink; and to many adults, too, the fact that the floating soap in the bath tub can be immediately located is a great point in its favor. Personally, I like the *feel* of a good aerated soap—and by this I mean not only its texture but its featherweight lightness and bulk.

Part I of Two

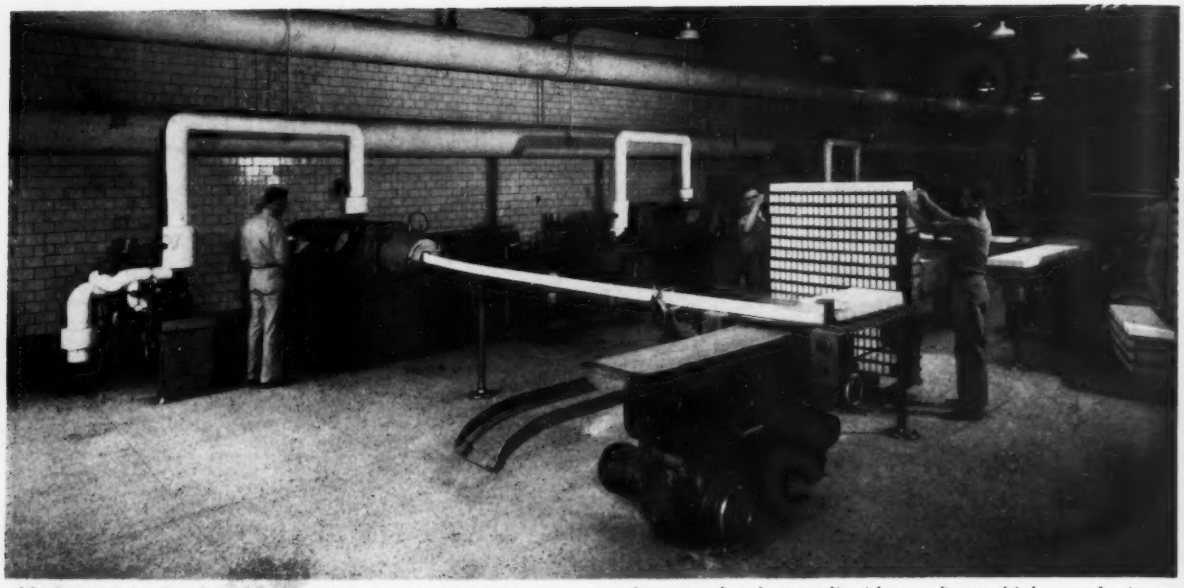
Evaluation

THE chief advantages and disadvantages of floating soap may be summarized, perhaps, as follows:

Advantages: (1) It floats on the surface of the water and so can be instantly located, even in cloudy water or a steamy bathroom; (2) it is made from high-grade raw materials, almost as a matter of technical necessity; (3) it has a pleasantly characteristic texture, handles well and looks attractive.

Disadvantages: (1) It is more than normally prone to rancidification, owing to the occlusion of air; (2) for the same reason, it tends to exhibit reduced lathering properties; (3) its homogeneity and ratio of volume to weight have to be carefully controlled, in order to avoid the production of non-uniform or distorted cakes; and (4) it is more expensive to produce than

*Editor of *Soap, Perfumery & Cosmetics*, London. Consultant-Perfumer.



Mechanical freezer (second from left) turns out endless bar of floating soap. White pipes, coming up through floor and arching overhead, carry liquid soap first to high speed mixer, extreme left, and then to freezer. *Procter & Gamble photograph*

a non-aerated soap of similar constitution.

Floating soaps, when allowed to remain in water instead of being promptly placed in the soap dish, are dissolved and used up at a fairly rapid rate. This minor disadvantage from the consumer's point of view is more than offset by novelty-appeal; to the manufacturer, moreover, it is of course an advantage in that it increases sales.

In a broad, general survey of this type, I think it advisable to quote U. S. Federal Specification for Soap, Toilet (Floating, White) P-S-616b, which reads as follows:[1]

"This specification covers a white floating cake soap suitable for use in personal bathing and general cleaning with soft water. It shall be of but one type. White floating toilet soap shall be a cake soap of white color, mild and pleasant in odor, thoroughly saponified, and so prepared as to float on water. The material shall conform to the chemical requirements in the table (I) shown below.

"The percentage of moisture and volatile matter shall be computed and reported by the testing laboratory on the soap as received. The percentages of all other constituents shall be calculated and reported on an assumed moisture and volatile matter content of 34 per cent."

Physical, chemical and mechanical means have been utilized in the production of lighter-than-water soaps. Some of them have been merely ingenious and others quite fantastic (for who would dream of using a soap containing cork flour, kapok fibres or "small hollow glass marbles"?) Still other methods have proved to be technically unsound or economically prohibitive.

Bergeron gets right down to the core of the matter when he writes:[2] "It is particularly tempting to make a floating soap, since the soap itself has a density very little more than that of water, and only a relatively small percentage of air is needed to obtain the desired result."

Why Soap Floats

IN other words, soap is made to float by incorporating minute air bubbles into it before it solidifies. This is still the most straightforward and satisfactory way of making floating soap, even though considerable mechanical skill and physio-chemical knowledge may be required in order to bring the process to perfection.

Attempts were made in the past to make ordinary, non-aerated soap cakes float by embedding into them cork or wood floats, or by inserting a thin metal plate in such a manner that a sufficient air space was left between the soap and the

Table 1. Requirements of White Floating Soap (P-S-616b)

	Min.	Max.
	Percent	
Moisture and matter volatile at 105°C	.....	34.0
Sum of free alkali, total matter insoluble in alcohol, and sodium chloride	.....	2.0
Free alkali, calculated as sodium hydroxide (NaOH)	.....	0.1
Choride, calculated as sodium chloride (NaCl)	.....	1.0
Matter insoluble in water	.....	0.4
Anhydrous soap	62.0	.....
Rosin	.....	None
Sugar	.....	None
Acid number of the mixed fatty acids prepared from the soap	212	.....

Soap cakes, after cutting, are loosely stacked and conveyed through long tunnels in which moving air dries a thin skin on outer surface of each cake.
Procter & Gamble photograph

metal.[4] Soap "Easter eggs" that will float have been made by the simple expedient of bonding together two concave shells of soap, but in such cases the bonding is, of course, extremely fragile and impermanent. It is conceivable, however, that soap could be extruded in such a way as to flow around and over a small air-filled plastic sac or capsule. My own view is that there is no market, except possibly a seasonal one, for these "trick" soaps.

According to Geoffrey Martin, the first straightforward floating soaps were those made in China "many centuries ago."[3] Apparently they incorporated air, and were thus basically similar to those on the market today. This seems doubtful, but aerated soaps of one kind or another have undoubtedly been made for at least a century. Most have been produced by the simple expedient of beating or injecting air into the still viscous soap mass—but other gases, including hydrogen, oxygen and carbon dioxide, have also been used or suggested for use, sometimes by mechanical incorporation and sometimes as the result of a chemical reaction in the soap kettle or crutcher.

Among the less common and therefore, presumably, less satisfactory processes is a 50 year-old Austrian patent (No. 2773 of 1905) which made use of carbon dioxide bubbles produced by the admixture of sodium bicarbonate powder to the soap paste just prior to framing. Psyllium seed (fleaseed) was also added, apparently to increase viscosity and regulate the size of the bubbles. The kettle soap, we are told, was prepared from a mixture of 210 kilograms of coconut oil, 15 of bleached palm oil, 25 of rosin, 50 of olive oil and 60 of tallow. This high lauric acid blend was saponified by means of caustic soda. About 200 kilograms of fleaseed were mixed with the hot, liquid kettle soap and then, shortly before the soap was poured into the frames, pulverized sodium bicarbonate was added. The decomposition of the bicarbonate into sodium carbonate and carbon dioxide gas caused the aeration of the soap so that it could float on water. It may be noted that the evolution of CO_2 under specified conditions also serves as the basis of a much more recent Canadian patent (No. 429,508), assigned to C. W. Kelley. On theoretical grounds carbon dioxide would not seem to be an ideal aerating agent for inclusion in soaps. One wonders whether the texture of the finished soap and, in particular, its stability on storage would be all that could be desired.

Oxygen and hydrogen bubbles have been used to reduce the specific gravity of soaps. Oxygen, which may be liberated by peroxy compounds or injected from a cylinder into the soap paste (as in the obsolete German patent 246,479 of 1910 assigned to E. Kroning) has an obvious disadvantage, in that it increases the risk of subsequent rancidification. The utilization of hydrogen has had many advocates, especially in regard to its application on a relatively small scale where traces of powdered metals may be added to a cold-made or semi-boiled soap mass. Here we have a simple chemical reaction between free caustic soda and the finely divided metal, producing the corresponding sodium salt with the liberation of hydrogen—the latter forming small bubbles throughout the batch.

German patent 549,145 was quoted in a survey of floating soaps published by the *Seifensieder-Ztg.* in 1933 and in an American article by Blumenthal in 1935.[5] This patent covered the admixture to hot liquid kettle soap containing free alkali of zinc dust or aluminum, bronze or magnesium powder, "the quantity of the metallic powder so used being equivalent to that of the free alkali present in the soap, the latter not exceeding 0.02 percent." Blumenthal himself advises the use of 0.03 to 0.05 percent of powdered magnesium. The best alternative to magnesium has been said to be aluminum, but Blumenthal considers this to favor the onset of rancidity, possibly due to traces of the free metal acting as an autoxidation catalyst. The preferred process of manufacture that he gives may be briefly summarized as follows:

This is a cold or semi-boiled process. Initial saponification of the melted fats and oils is carried out in the usual manner. Just before the batch is run off into frames, from 0.03 to 0.05 percent of finely powdered magnesium is thoroughly incorporated, care being taken to in-

sure the presence of 0.1 percent free alkali, calculated over that needed to complete saponification. The powdered metal does not react appreciably at first with the alkali, but the reaction gradually comes to completion during the spontaneous heating of the soap in the frames. The latter should be only partly filled, because of the increase in volume that takes place during the liberation of hydrogen. The microscopic bubbles of gas are said to be about half the size of those obtained when air is incorporated, with the result that the soap has a correspondingly smoother internal structure. It is also possible, says Blumenthal, to use a percentage of lower grade, darker fats and oils in the making of such soaps, due to the reducing and bleaching action of nascent hydrogen. He further and quite reasonably considers that the dispersed hydrogen bubbles exert an antioxidant effect, provided that no trace of free, unreacted metal remains in the soap. (It is as well to note that the semi-boiled method, with its improved facilities for the adjustment of alkali, etc., is much superior to the straightforward cold process for the operations outlined by Blumenthal.)

When a full-boiled soap is to be "aerated" by this means, we are told that the proportion of powdered metal should be increased to 0.07 or even 0.1 percent, in order to compensate for losses to the atmosphere. This could probably be obviated or at least minimized by appropriate mechanical means. The optimum temperature at the time of adding the metal is given as 70°- 80°C. After thorough mixing, the treated soap paste is dropped into frames and allowed to cool. Here it is necessary for the soap chemist to experiment a little, in order to discover the optimum rate of cooling. A soap cooled too quickly is likely to contain traces of free metal, whereas one cooled too slowly may allow an appreciable proportion of the gas to escape, thus losing its floating properties.

So much for the incorporation of reactive metals, a process that depends for its potentialities not only upon careful timing and strict control of temperature, but—above all—on economic considerations and subsequent stability in storage.

German patent 611,045, assigned to the Mouson Company, relates to the production of floating soap by incorporating small amounts of silicon into hot curd soap, with the formation of a silicate and the liberation of hydrogen. The more up-to-date Belgian patent 449,078, assigned to Chem. Fab. von Heyden A.G., claims the use of one percent of dioxodisiloxane.

Conventional Aeration

WE come now to the more conventional and generally more satisfactory methods of incorporating air into soap. The paragraphs that follow are intended chiefly for the smaller soapmaker who, if he decides to produce a floating soap, is further recommended to study all the relevant patents that he or his patent attorney can discover. This is a special branch of soapmaking in which the "know how" counts for far more than analytical figures or published formulae. The exact "know how" largely depends on the size and scope of the plant.

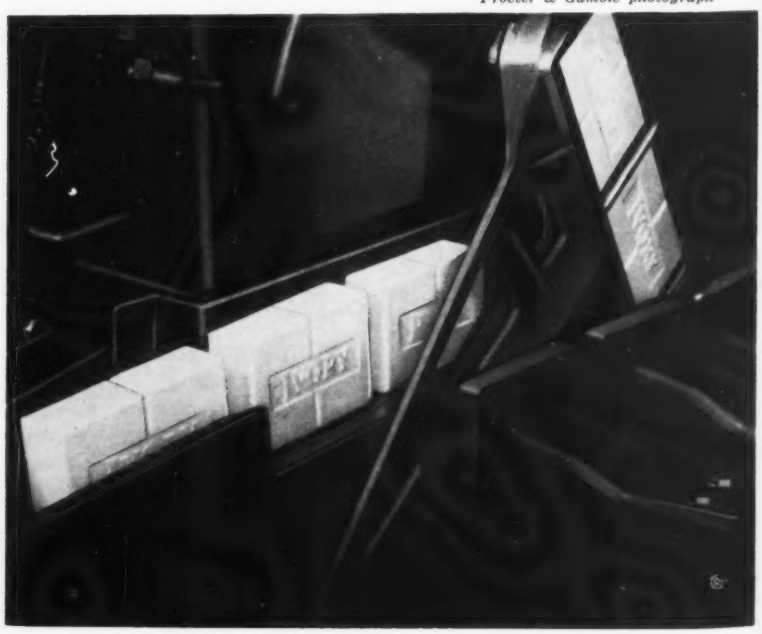
hTe first floating soaps, as Bergeron points out,[2] were manufactured by the semi-boiled process, air being included by whipping or beating the mass of still hot soap, and then running the latter into moulds. Hilditch's description goes one better than that, in that he refers to the important factor of water content: "In order to produce a soap which will float on the surface of water a cold process soap, or a toilet soap base of suitable water content, may be violently agitated or injected with air after being brought into a warm, pasty condition, and then allowed to cool and set in moulds; the solidified soap retains the air in the form of enclosed minute bubbles and the specific gravity of the whole is less than that of water, the product being sold as floating soap."[6]

As has already been pointed out, the cold process as such is not so suitable for floating soap manufacture as the semi-boiled process, for in the latter case saponification can be brought considerably nearer to its theoretical end-point, with the

(*Turn to Page* 130)

Modern high speed stamping machine presses name of soap onto bars. From here soap goes to wrapping machines.

Procter & Gamble photograph



"Kard-O-Pak" paper bags of American Bag and Paper Corp., Philadelphia, lined with a plastic film are used by Turco

Products, Inc., Los Angeles, to package its line of industrial cleansers. Color coding system differentiates products.

Turco Switches to Bags

...for its line of cleansers. New bag stands flat like a carton and has flexibility of a bag. Savings in labor, time and ease in handling are claimed for new packaging.

A NEW development in the packaging of detergents and cleansers for industrial and institutional use and one that may have far-reaching effects is being applied successfully by a major producer of these materials. The idea appears to represent a complete reversal in packaging thinking. Where previously industrial packaging has been geared to large single quantities, it is now switching to a multiple unit of small individual quantities.

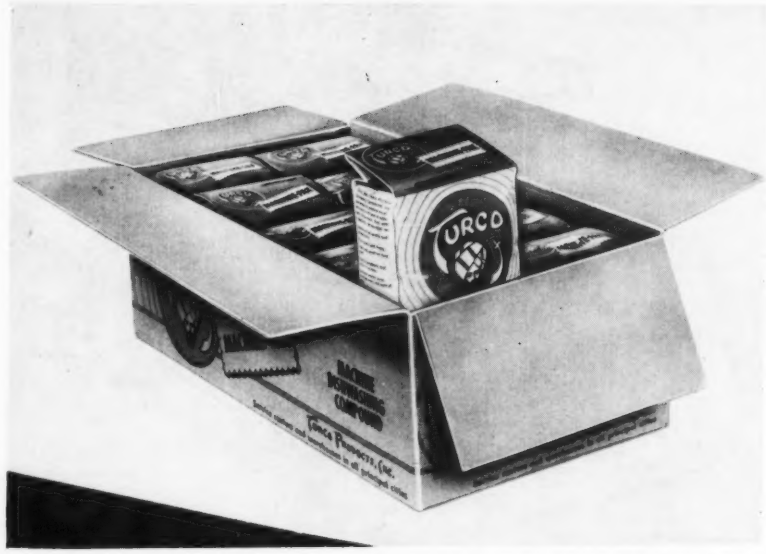
For years the dry chemical industry has been trying to find a method of packing that would correct the inefficiency, waste and inconvenience of bulk packaging. The need was for a single unit that would fill all these requirements: protect the contents from grease seepage, air and moisture deterioration and eliminate caking; could be packed in rectangular, disposable containers to make shipping, handling and storage easier; eliminate the problem of container returns; be sufficiently durable to withstand abuse; could be easily filled by automatic, high speed methods. It was agreed that a bag would be ideal if its flexibility were maintained and the advantages of a carton added.

The result of concentrated research and testing to create such a container is the "Kard-O-Pak" bag, produced by American Bag and Paper Corp., Philadelphia, which the maker claims fills all of these requirements. The new bag stands flat like a carton and has all of the flexibility of a bag. It can be made to hold a convenient five-pound quantity. This size, for example, packs ten bags to a disposable, rectangular carton.

Until now, there has been great resistance in the industrial field to paper bag packaging. Paper

absorbed grease and moisture, tore easily if the contents were of an abrasive nature or if the bag were handled excessively. Obviously, the ordinary paper bag would have neither the rigidity to stand flat nor would it give the contents the kind of protection required. To find the paper stock with the necessary properties, various tests were conducted in the laboratory of American Bag and Paper Corp. A wide range of stocks were tested for rigidity and abrasive wear. When linings were considered, a polyethylene lining was selected because of its moisture-proof and heat-sealing properties. As a result, the "Kard-O-Pak" bag became a lined bag. The exterior was of a heavy-duty calendared stock and the interior either a polyethylene or pliofilm lining. This combination was again tested for packing a wide range of contents from chemical compounds to highly abrasive materials. The new bag passed all tests for resistance to moisture, grease, scratching and tearing. Compounds were poured into bags which were heat-sealed, tested, then opened and the contents poured out. There was no caking, deterioration or seepage.

Among the numerous major companies who saw the advantages of the "Kard-O-Pak" for heavy duty use was Turco Products, Inc., Los Angeles, manufacturers of chemical compounds used as detergents at industrial and institutional levels. Turco broke with the traditional methods of bulk packing its detergents with surprising results. The new type packaging has achieved the following: (1) it reduced the number of personnel required to handle packaging both for Turco and its customers; (2) it cut down on the amount of storage space previously needed; (3) test uses showed a considerable reduction of compound wasted by users; (4) it increased the efficiency of the individual products by shortening the time products are exposed to air and moisture; (5) it opened up new markets for the company's various chemical compounds.



Ten, five-pound bags of its various cleansers are packaged in flat carton by Turco Products. New packaging is said to be easier to handle and store and cuts waste in use of products, as well as opening new markets.

Turco customers find that with the new packaging they are able to effect great savings in energy and product, as well as in the number of employees required to apply the materials.

When using the new "Kard-O-Pak" bag, the maintenance employee obtains a five pound bag, which can be stored close to where it will be used, open it and it pours. There is no caking or spilling, and additional containers are not required. Turco has found that this not only reduces waste during use, but also discovered that the new packaging acts as a labor saver, since it provides more actual productive working time. Because the bag is small, it may be carried to the area where the cleaner is to be used. If more cleaning material is required, additional bags may be obtained quickly, since they are stored close to where they are to be applied, and without the expenditure of excessive energy.

During other cleaning operations, such as hand-dishwashing, the bag of cleaning compound remains intact, even when handled by a person with wet hands. Because of the relatively small bag size, the package can be kept within easy reach.

Larger cleaning compound packaging units require large space for storage and are difficult to move. Rectangular cardboard cartons which hold 10, five-pound bags can be stored more compactly and are easier to move. Compactness also is an advantage in shipping the smaller package units. Because of its rectangular shape a carton of 10 "Kard-O-Pak" bags can be stacked flush to the walls of trucks or freight cars. Thus, greater quantities per foot can be shipped, with a proportionate reduction in costs. Also, unloading cartons at their destinations is easier and requires less expenditure of labor with smaller units.

The problem of container return is eliminated with the use of the new type packaging. Returns have always been a source of irritation and expense.

In designing a bag, such as the "Kard-O-Pak," a major consideration was its adaptability to high-speed filling. Obviously, no matter how many or great are the other advantages of a small package unit, if it is not adaptable to automatic high-speed filling its cost at the consumer level is prohibitive and the headaches it would cause in the manufacturing stage would be too numerous. The "Kard-O-

Pak" bag stands flat, which is important not only because of shipping and handling considerations but in order for it to be filled by modern, high-speed packaging machines and equipment. The bag has been designed to open and close quickly. In addition, each bag must be uniform for precision filling.

Another advantage offered by the new type packaging adopted by Turco Products is the "plus" of attractive label design which acts as a "silent salesman." The household products field has proven the need for package design and decoration that sells. The new, small unit package made it possible for Turco to sell and service the entire field of small users who were unable to buy from the firm previously because the cost and size of bulk packages were prohibitive to them. Such users represent a complete new field of the sale for Turco's products. As a result, a complete product-selling design job was necessary.

A specially designed logo was adopted by Turco, using a color-coding system to differentiate between its products. The colors selected are attention-getting hues that make it easy to identify products quickly. For example, "Super Steameze," a medium duty cleaner formulated for indoor cleaning, is packaged in a bag the label of which is easy-to-see green on white; the color scheme for the label of "Super Steamfas," an extra-heavy duty cleaner, is bright red on white for sharp contrast. Contrast is also achieved for the label of Turco's machine dishwashing compound, "Han-Fax," by using light purple on white. To distinguish their floor cleaning compound "Oilift" from other products in the line, a fifth color combination, orange on white, is employed. A color coding system was almost mandatory since so many of Turco's customers buy several different compounds. The success of the color system is attested to by Turco customers who say that now it is virtually impossible to take the wrong product from the shelf.

The overall package has been designed to identify quickly both the Turco name and the product name. One side has been used to state the purpose of the compound, suggest uses, give full directions for use and antidote instructions where necessary. The opposide side is used for a selling story on the compound and its maker. Since each package gives the complete story about each compound, it is well and properly sold as it passes from jobber, to dealer to user without costly training. It actually sells itself and, thus, small dealers can stock it by doing little more than placing it on the shelves.

The "Kard-O-Pak" bag has decidedly started a new era for industrial use of the paper bag. The development of synthetic lining to offer the protection previously lacking, the selling label and the actual package design are revolutionary developments in industrial packaging. With this new method, the product flows efficiently from manufacturer to user and on into wider markets. In a year of use the combination of a polyethylene lined paper bag in small five pound quantities is establishing a new trend for industrial and bulk packaging of chemical specialties.

Quaternaries in Cosmetics

The combination of antiseptic and surface-active properties exhibited by quaternary ammonium compounds is of considerable interest to cosmetic chemists. Purified quaternaries are not irritating to the skin in effective concentration and show a low degree of oral toxicity. In addition, odor and color properties of these salts are sufficiently desirable to suggest their use in cosmetics in preference to some of the antiseptic substances employed in skin preparations.

In most cases where a cosmetic may also be antiseptic, keratoplastic and deodorant effects quaternaries may be added, but their choice must be determined by the end use of the product. An after-shave lotion suggested by Rohm & Haas Co., Philadelphia, contains:

	percent
Hyamine 10 X (25%)	0.25
Alcohol (ethyl)	40.0
Menthol	0.005
Benzocaine	0.025
Water	59.72

A cosmetic and germicidal cream covered by U. S. patent 2,295,505 comprises:

	parts
Quaternary	0.1
Glyceryl monostearate	10
Glycerine	15
Water to make	100

Being cationic, quaternaries are incompatible with anionic wetting and emulsifying agents. Nonionic or cationic emulsifiers such as alkyl aryl polyether glyceryl monostearate and polyglycol derivatives of fatty acids and carbohydrates must be used. Oils, creams, and lotions may be formulated with 0.1 percent to 1.0 percent of quaternary. In products having a fatty base, higher concentrations are used because of the slow diffusion of the germicide from the oil phase to contact the organism.

The use of a cetyl alcohol emulsion in combination with a quaternary is said to eliminate the need for any other emulsifier. With 7.5 percent cetyl alcohol and 0.5 percent to two percent quaternary, a cream can be prepared with is claimed to exhibit excellent storage qualities.

An antiseptic jelly is formulated from:

Gum tragacanth (powder)	600 grains
Glycerine	16 ounces
Benzalkonium chloride (12.8%)	5 drachms
Distilled water	160 ounces

In antiseptic lotions using quaternaries the latter should not exceed 0.1 percent to avoid skin irritation, because the product is usually applied in undiluted form.

A medicated shampoo formula is suggested:

(*Turn to Page* 130)

Above: Soap being fed into the plodder during the preplodding operation.

First odor check of the perfumed soap.

Pilot Soap Plant Tests

PERFUMING of soap involves not only creation of a suitable fragrance by the perfumer, but also evaluation of the finished composition in the soap itself. Without actually trying the perfume in the type of soap in which it is to be incorporated, it is difficult to ascertain whether or not it is completely compatible with that particular soap base.

The testing of perfume in soap has long been a vital step in the process of creating fragrances for this purpose in the perfume laboratories of Givaudan-Delawanna, Inc. In the past, the testing of new fragrances has been done in 25 gm. test cakes made in the usual miniature soap plodder and die. Recently, soap manufacturers became aware of the fact that results obtained from such test cakes did not accurately foretell the performance of the fragrance in a full size, three-ounce cake of soap. Practically all of the major soap manufacturers have since changed over to the use of full size cakes in their fragrance testing.

Realizing the importance of this change, Givaudan-Delawanna, Inc., has recently installed a laboratory for soap preparation at its plant in Delawanna, N. J.

This laboratory contains modern, pilot-scale, soap-making equipment, including a soap plodder having various type heads, a stainless steel three-roll mill and, of course, a press for the molding and marking of the finished bar. Here, a soap perfume is incorporated into a finished bar by the methods commonly employed in commercial soap manufacturing and this results in a finished soap bar identical in composition to the one which may eventually reach the retailer's shelf.

Batches can be made ranging in size from three kilos to twenty kilos. About twenty-five small bath size cakes can be made from one batch, usually a sufficient quantity for testing purposes. The batches are compounded and run through the equipment in a planned, uniform process. Batch sheets are kept on each batch. These sheets contain

(*Turn to Page* 225)

Captions from bottom to top:

Soap batch being compounded under supervision of perfumer.

Three-roll mill in operation with soap coming off in sheet form. Worker wears dust filter mask for protection.

Hopper of soap plodder being charged with sheet, from roll-mill (below) at the beginning of preplodding operation. Note that when safety interlock grid is raised machine cannot operate.

Soap being extruded from electrically heated plodder head and being cut into bar size lengths.

Scents

Top center: Soap blanks being formed into bars in the foot press.

Top right: Finished soap being removed from press. Company name and test number have been imprinted.

Second row, left: soap bars being examined after exposure to ultraviolet light to ascertain its effect on fragrance and color.

Second row, right: Soap bars from file being given a periodic evaluation for odor.

Bottom row, left to right:

Notes being taken on stability of soap cakes which have been exposed to ultraviolet ray oven.

Center: Soap cakes being checked for evidence of discoloration caused by heat in oven.

Evaluation of odor in a bar of perfumed soap after being subjected to elevated temperatures in oven.

Techniques for Evaluating

Low-Foaming Detergents

By Manuel N. Fineman, Harold L. Greenwald and Charles G. Gebelein*

Research Laboratories, Rohm & Haas Company, Bridesburg, Pa.

Part II

ALTHOUGH low foam is an essential prerequisite for surfactants used in mechanical dishwashing, metal cleaning or similar applications, it is certainly not a sufficient property *per se*. To be really useful, such surfactants must be surface active so that they can promote wetting, spreading and rinsing, and improve detersive efficiency. For example, use of a highly surface active material such as Experimental Detergent CF-10 as an additive in the final rinse of a dishwashing machine has been shown to promote superior drainage and to permit spot-free drying of glassware and of silverware so that the usual tedious, and often unhygienic, handtowelling operation can be eliminated.

Surface activity can be measured in the usual fashion by a simple tensiometer; and some information regarding wetting can be deduced from consideration of spreading coefficient data. Niven (2) points out that the less negative, or the more positive, the spreading coefficient for aqueous phase on oil, the better the wetting and drainage will be. Sample data, reported in Table VI, show that Experimental Detergent CF-10 meets Niven's requirements.

However, the spreading coefficient is inadequate for predicting detersive efficiency. It describes only the tendency for an aqueous phase to wet or spread over an oil phase; it does not describe the tendency for an aqueous phase to displace oil or soil from a solid surface. The latter is the prerequisite for detergency and requires consideration of the interfacial tensions between oil or aqueous phase and the solid surface involved, or of the contact angle between soil, solution and substrate. Although these contact angles can be determined, they are primarily of theoretical interest; more significant to the consumer is the observation of detersive efficiency under actual or simulated use conditions.

Use of Launder-Ometer

ADAPTATION of the Atlas "Launder-Ometer"* for use as a test instrument in measuring detergency of hard surfaces has already been described.(3) Briefly, this test involves soiling of small metal or plastic substrates with an oily-carbon soil, agitation in the "Launder-Ometer" under controlled conditions of temperature and time, and visual rating of soil removal in terms of an arbitrary set of standards. For this work glass, melamine formaldehyde plasticware, and stainless steel were selected as substrates often encountered in dishwashing. Detergents were evaluated at five concentrations ranging from 1.0 to 0.01 percent and visual ratings of the substrates were converted to percentages. Sample data for a number of commercial powdered dishwashing detergents are described in Table VII. It is apparent that most of the detergents cleaned the glass readily; however, not all of them cleaned the steel. The plastic substrate was the most difficult to clean and five of the materials had no effect on this substrate.

Addition of surfactant to an inorganic formulation improved performance on glass and steel; however, the greatest degree of improvement was observed on plastic and this served as a useful guide in evaluating these materials. In Table VIII detergency data are reported for blends consisting of Inorganic Formulation M to which various surfactants had been added in amounts ranging from 2 to 10%. Formulation M was essentially similar to K except that the sodium sulfate diluent had been replaced by urea. At the 10 percent level, Experimental Detergent CF-10 was as efficient as "Triton X-100" and slightly better than "Triton X-114." It was still very effective at the five percent level but dropped off in performance when used at the two percent level in the inorganic formulation.

This same dynamic detergency test could be used for evaluating efficiency of surfactants alone, in the absence of inorganic builders, and representative data of this type are reported in Table IX.

It should be noted here that these laboratory detergency data are useful for comparison of materials and only applicable for the particular soil, substrate, temperature, agitation and other conditions of the test. Because of the many variables in an actual detergency operation, laboratory observations should be interpreted with caution and field trials should be undertaken to

*Presented at 41st mid-year meeting of Chemical Specialties Manufacturers Association, May 17, 1955, Chicago.

*—Model B-5, Manufactured by Atlas Electric Devices Co., Chicago, Ill.

confirm trends indicated by the laboratory tests.

A number of these low-foaming formulations have been evaluated in commercial and home dishwashers. Good correlation with laboratory data was obtained in a cafeteria dishwasher where conditions were fairly well controlled for all samples. In home testing, where other factors such as water spotting and film formation distract the panelists from an objective evaluation of detergency alone, the correlation was fair.

Other Applications

IN addition to mechanical dishwashing, there are many other applications in which foam is undesirable. One of these involves formulation of detergents for use in automatic clothes washers of the tumbler type. Although these machines can generally tolerate much more foam than dishwashers, excessive foam tends to cushion the clothes and reduce mechanical efficiency and, hence, detersive efficiency. In addition, foam collects in the space between the rotating and stationary tubs and produces "suds lock" which reduces efficiency of water extraction.

Formulations CG-320 and 321, consisting of 10 and five percent, respectively, of Experimental Detergent CF-10 incorporated into the Inorganic Formulation M to which one percent of sodium carboxymethyl cellulose and 0.05 percent of an optical brightener had been added, were compared with several commercial materials in a tumbler type of washer, a Westinghouse "Laundromat." Six different kinds of soil cloth, having both oily and dry soil types, were used together with a load of towels for bulk. Detergent concentration was 0.5 percent, in 75 ppm hard water, with 20 minute suds time at about 120°F., and 10 minutes rinse time at 100° F. Detersive efficiencies, in terms of the usual reflectance readings are reported in Table X. Foam height over the surface of the solution was estimated through the window of the machine. The composi-

Table VI. Surface Activities and Spreading Coefficient Data
(dynes per cm.)

Surfactant	Concn. %	Surface tension	Interfacial tension (against mineral oil)	Spreading Coefficient (of solution on oil)
Water		67.5	35.0	-74.5
Mineral Oil		27.9		
Comm. Surfactant B	0.10	36.6	6.9	-15.6
Comm. Surfactant B	0.01	39.2	9.4	-20.8
Exp. Detergent CF-10	0.10	29.3	2.6	- 3.9
Exp. Detergent CF-10	0.01	30.5	4.4	- 6.9

Table VII. Soil Removal Efficiencies of Commercial Detergent Formulations

Detergent	Glass	Plastic	Steel	Average
Product A	88	13	98	66
Product B	88	3	98	63
Product C	93	3	90	62
Product D	85	0	68	51
Product E	90	0	55	48
Product F	93	13	75	60
Product H	95	3	80	59

Table VIII. Soil Removal Efficiencies of Blends of Inorganic Formulation M with Various Surfactants

Surfactant	Concn. %	Glass	Plastic	Steel	Average
—	—	93	0	90	61
Exp. Detergent CF-10	2	95	13	95	68
Exp. Detergent CF-10	5	98	45	95	79
Exp. Detergent CF-10	10	95	58	98	84
Triton X-100	10	98	58	100	85
Triton X-114	10	100	48	93	80
Exp. Surfactant #7	10	95	45	100	80
Comm. Surfactant B	10	88	15	90	64

Table IX. Soil Removal Efficiencies of Surfactants Alone

Surfactant	Glass	Plastic	Steel	Average
Commercial Surfactant A	70	25	38	44
Commercial Surfactant B	78	25	90	64
Experimental Surfactant #7	88	45	85	73
Experimental Detergent CF-10	93	38	100	77
Triton X-114	93	58	100	84
Triton X-100	95	73	100	89

Table X. Reflectance Data of Various Soil Cloths by Laundromat Test

Detergent	Cotton		Wool		Viscose	Nylon	Foam	
	oily	dry	oily	dry	oily	oily	3 min.	10 min.
CG-320 (10% CF-10)	40	37	52	36	38	53	nil	nil
CG-321 (5% CF-10)	40	35	51	33	41	54	nil	nil
Low Foaming Product A	36	34	41	27	31	49	1"	5-7/8"
High Foaming Product T	45	33	48	52	43	52	12+"	12+"
Unwashed soil cloth	23	27	17	14	22	20		
Unwashed white cloth	84	84	59	59	79	76		

tions containing Experimental Detergent CF-10 were as good or better than the commercial products which are among the largest selling in the home laundry field. They were especially effective on viscose where the only other good detergent was the high-foaming product. Moreover, foam was much less than that of the standard low-foaming commercial material. Several home trials have tended to confirm these laboratory findings.

Low foam is also a major requirement in spray type bottle washing and metal cleaning applications. Detergents used in these applications are generally highly alkaline and often contain appreciable amounts of caustic. Consequently, to be useful in such formulations, surfactants must be stable in strong caustic at very high temperatures, and for prolonged periods of time. Low-foaming nonionic esters, such as those based upon tall oil, have been shown to hydrolyze under these conditions and to produce high-foaming products. Nonionic ethers cannot hydrolyze, but they tend to discolor on caustic. Materials such as "Triton 9X-123," however, are stable and therefore have found utility in these applications.

In-place dairy pipe line cleaning requires stability of surfactants to acidic conditions, as well as low foam; and here, again, the excellent performance and stability of the low-foaming nonionic ethers makes them particularly attractive.

The properties of very low foam and a high degree of surface activity can be useful in applications other than those involving the detergency process. For example, addition of Experimental Detergent CF-10 to pulp in the head box of a paper machine results in production of paper towelling having improved absorption characteristics without the hazards of excessive foam so often encountered when other surfactants are used.

We have attempted to describe here only a few, albeit the more important, of the many industrial applications in which low-foaming surfactants can be useful. Undoubtedly there are many more, so that the commercial future of these unique materials seems assured.

Acknowledgements:

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New Hooker Sales Reps.

Four changes in the sales staff of Hooker Electrochemical Co., Niagara Falls, N. Y., were announced last month by Robert E. Wilkin, vice-president and general sales manager. George Chynoweth and Joseph J. Lenahan have been appointed sales representatives. Mr. Chynoweth covers Illinois under the supervision of the Chicago district office. Mr. Lenahan's sales territory is western Pennsylvania and West Virginia with headquarters in Pittsburgh.

Julian J. Boyce has been transferred from the Philadelphia sales area to cover the southeast with headquarters in Charlotte, N.C. James M. Young, 3rd has been assigned to technical sales service in Tacoma, Wash.

SYNTHETIC DETERGENTS

and Emulsifiers—Up to Date

Part III of Four

By John W. McCutcheon

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Igepon TE-42	Antara Chemicals, a sales division of General Aniline & Film Corp.	Sodium N-methyl-N-"tallow acid" taurate	Detergent Dispersant Wetting	Liquid	24%	Anionic	Used alone or with builders for textile washing purposes, commercial laundering or hard surface cleaning
Igepon TK-32	Antara Chemicals, a sales division of General Aniline & Film Corp.	Sodium N-methyl-N-"tail oil acid" taurate	Dispersant	Liquid	25%	Anionic	Precipitation inhibitor for organic and inorganic salts of Barium, Calcium, Strontium; scale preventive
Igepon TN-74	Antara Chemicals, a sales division of General Aniline & Film Corp.	Sodium N-methyl-N-acyl taurate	Detergent Wetting Dispersant	Powder	44%	Anionic	Soluble in water; stable to acid and alkali; used in paper mill felt washing, leather degreasing, and textile scouring; herbicide and insecticide dispersant
IN-181 P51% -181 Paste -256 -826	E. I. du Pont de Nemours & Co., Grasselli Chemicals Dept.		Wetting				This is a series of wetting agents for use in agricultural products and sold only to processors. They represent renamed products offered through other channels. See "Duponol" and "Alkanol"
IN-531 2503	E. I. du Pont de Nemours & Co., Grasselli Chemicals Dept.		Emulsifier				These are emulsifying agents offered to processors in the agricultural field. They represent renamed products through other channels. For example, "IN-2503" is a fatty alcohol sulfate.
Indrawet— —HH	Industrial Raw Materials Corp.	Alkyl aryl sulfonate	Detergent Wetting	Powder	85%	Anionic	Single alkyl side chain of C_9 min.; high detergency; "Indrawet HH" is a spray dried product for household use.
Insidol	Arkansas Co.	Sulfo-dicarboxylic acid ester	Wetting	Liquid	25%	Anionic	A textile penetrant for all wet processing operations
Integritol	Hart Harrington, Inc.	An alkyl aryl sodium sulfonate	Wetting Penetrant				Alkyl chain is below C_8. Uses: paints, textiles, leathers
Institution X Extra Granules	Procter & Gamble Co.	Essentially sodium alkyl sulfate	Detergent	Granules		Anionic	Built heavy duty type detergent and cleaner for institutional maintenance
Intracol —OA —O —S —M	Synthetic Chemicals, Inc.	Long chain fatty acid amide containing multiple amine groups	Wetting Dispersant Emulsifier	Paste		Cationic	Textiles, rubber, pigments, etc. "Intracol OA" and "S" are water soluble, "Intracol O" and "M" are oil soluble; effective as an emulsifier for fatty acids.
Intral AE	Synthetic Chemicals, Inc.		Wetting	Liquid	100%	Nonionic	Water soluble; stabilizing and wetting agent
Intral 224	Synthetic Chemicals, Inc.	Saturated long chain fatty acid ester containing multiple ether linkages	Wetting Emulsifier	Liquid		Nonionic	Not compatible with organic salts or electrolytes; uses: textiles, rubber, etc.
Intral 229 384	Synthetic Chemicals, Inc.	An unsaturated long chain fatty acid ester containing multiple ether linkages	Wetting Emulsifier	Liquid		Nonionic	Water-soluble; active in highly alkaline solutions
Intral 433	Synthetic Chemicals, Inc.	A saturated long chain fatty acid ester containing multiple ether linkages	Wetting	Powder		Nonionic	Textiles, rubber, pigments, etc.
Intramine WK-33 —Y	Synthetic Chemicals, Inc.	Sodium salt of sulfated lauryl and myristyl collamide	Detergent Wetting	Powder		Anionic	Water-soluble; used in textile, metal cleaning, rubber, shampoos
Isothan Q-15 DL-1	Onyx Oil & Chemical Co.	Lauryl isoquinolinium bromide	Fungicide	Liquid	20%	Cationic	General fungicide; sanitizing agent; dandruff formulations. "DL-1" is a dialkyl dimethyl ammonium bromide having bacteriostatic properties and useful as an emulsifier or coupling agent for water soluble quaternary ammonium salts. 75% active
Janusol	Synthetic Chemicals, Inc.	A mixture of lauryl and myristyl esters containing both primary amino and sulfated groups	Dispersant Emulsifier	Paste		Amphoteric	Stable in alkaline solutions peroxide and hypochlorite; textile, rubber, paints, as a dispersant and wetting agent
Joy (retail)	Procter & Gamble Co.		Detergent	Liquid			Dishes and fine fabric detergent

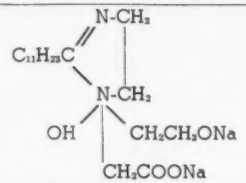
Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Katapol PN-430	Antara Chemicals, a sales division of General Aniline & Film Corp.	Alkyl polyoxyethylene amine	Emulsifier	Liquid	100%	Cationic	Emulsifier for agricultural chemicals in hydrocarbon solvents; mineral oils; soluble in water and hydrocarbons
Katapol VP-532	Antara Chemicals, a sales division of General Aniline & Film Corp.	Alkyl polyoxyethylene glycol amine	Detergent Penetrant Stabilizer	Liquid	20%	Cationic	Exhibits cationic properties in acid media and nonionic qualities in alkaline systems; scouring agent for wool
Katapone VV-328	Antara Chemicals, a sales division of General Aniline & Film Corp.	Quaternary ammonium chloride		Liquid	85%	Cationic	Acid corrosion inhibitor for steel, copper and aluminum; corrosion inhibitor and bactericide in oil producing and processing equipment
Kemulsion Base AA CC	Kem Products Co.	Fatty derivatives of a poly alcohol	Emulsifier	Liquid	90%	Anionic	These emulsifiers are designed for the following uses: "AA", cosmetics; "CC" for coal tar disinfectants
Keripon NC	Arkansas Co.	A polyethylene glycol fatty acid ester	Wetting	Liquid	50%	Nonionic	Leather degreasing, soaking and penetrant with fat liquors
Kessco DC-5B -10 -11	Kessler Chemical Co.	Complex polyhydroxy polyoxyethylene fatty acid esters	Detergent Emulsifier	Liquid	100%	Nonionic	"DC-5B" is an oil soluble dry cleaning detergent; "DC-11" as above but for Stoddard solvent; "Kessco DC10" and "11" are anionics.
Kessco WAX AC A-21 A-33	Kessler Chemical Co.	Fatty acid ester of polyhydroxy alcohol	Emulsifier Dispersant	Wax	100%	Nonionic	A series of cosmetic and pharmaceutical emulsifiers; "Kessco A-21" is anionic and contains a self-emulsifying ingredient; otherwise identical to "Kessco A-33."
Kessco X-10	Kessler Chemical Co.	Fatty acid ester of polyhydroxy alcohol	Emulsifier	Wax	100%	Anionic	An edible emulsifier for margarine, etc.
Kessco 23201 18303R	Kessler Chemical Co.	Polyglycol ether ester of fatty acids	Emulsifier Wetting	Liquid	100%	Nonionic	"Kessco 23201" is water soluble. Use: leather, textiles, paper, etc. "Kessco 18303R" is oil soluble; agricultural sprays
Kleneg	Armour & Co.	Polyoxyethylene ester and a quaternary plus builders	Detergent	Powder		Cationic	A built detergent containing a sanitizing agent
Kreelon 4D 4G CD CG	Wyandotte Chemicals Corp.	Alkyl aryl sodium sulfonate	Detergent	Flake	40%	Anionic	Conforms to alkyl aryl type detergent in detergent and wetting properties. "Kreelon CD" and "CG" are 38% active products incorporating 3.2% CMC. "Kreelon CG" and "4G" are in powder form.
Kreelon 8D 8G	Wyandotte Chemicals Corp.	Alkyl aryl sodium sulfonate	Detergent	Flake	85%	Anionic	Conform to alkyl aryl type in detergent and wetting properties; "Kreelon 8G" is in powder form.
Kyro AC	Procter & Gamble Co.	Modified amine condensate	Detergent	Liquid		Anionic	Textile processing, including fulling; industrial applications
Kyro EO	Procter & Gamble Co.	Alkylphenol ethylene oxide condensate	Wetting Detergent Dispersant Emulsifier	Liquid	100%	Nonionic	Laundry, textile processing and industrial applications
Lamepon Tech. O S 4C	Kalide Corp.	A fatty acid condensate with a protein base	Detergent Emulsifier	Liquid		Anionic	These products have high detergency and foam value, but are not acid stable. "Lamepon 4C" in a latex will materially slow down coagulation and is useful for this purpose in mixing some latices.
Lanafin	Standard Chemical Products, Inc.	Blend of fatty acid ester and soap	Emulsifier	Liquid	100%	Anionic	A general emulsifier for oils and solvents, particularly in textiles
Lanamine	Robinson-Wagner Co.	A substituted alkylamine of selected lanolic acids	Detergent	Paste	50%	Anionic	A high lathering detergent for cosmetics, particularly shampoos; shaving soap, etc.
Lanascour WK	E. F. Drew & Co.	Blend of vegetable potash soap and coconut fatty acid amine condensate	Detergent	Paste	50%	Anionic	For raw wool scouring

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Lanitol—F —CW	Arkansas Co.	Sodium alkyl aryl sulfonate	Detergent Wetting	Flake	40%	Anionic	Textile; all operations; "Lanitol-CW" is 65% active powder built with alkalis to serve as a heavy duty cleanser.
Lathanol LAL	National Aniline Div., Allied Chemical & Dye Corp.	Sodium lorol sulfoacetate	Detergent	Powder		Anionic	A concentrated product of approx. 3% water solubility for use in dentifrices, shampoos, etc.; solubility increased by use of solubilizing agents such as "Naccosol-O" etc.
Laureltex 10	Laurel Soap Co.	Alkyl aryl sulphonate and nonionic blend	Detergent Wetting	Liquid		Anionic	Textile scour and wetting agent
Laurol	Fine Organics, Inc.	Dimethyl benzyl lauryl ammonium bromide	Germicide	Liquid	100%	Cationic	The bromide of "Germ-i-tol" in 100% concentration
Lauryl Alkyl Pyridinium Chloride	Fine Organics, Inc.	As in name	Sanitizing	Liquid	80%	Cationic	Sanitizer and antiseptic
Lavapon WS-1	Rohm & Haas Co.	Alkyl aryl polyether alcohol	Detergent	Liquid	100%	Nonionic	Same as for "Triton X-100"; used for neutral or alkaline grease wool scouring and wool piece goods scouring
Leonil SA	Antara Chemicals, a sales division of General Aniline & Film Corp.	Naphthalene sulfonic acid derivative	Wetting	Powder	77%	Anionic	Leveling and penetrating agent in acid and chrome color dyeing of wool; wetting agent used in carbonizing bath
Lignosite	Puget Sound Pulp & Timber Co.	Salts of lignosulfonic acid	Emulsifier Dispersant	Powder Liquid	50%	Anionic	Products derived from fermented spent sulfite liquor used as emulsifying agents for oil-in-water emulsions and as dispersing agents for solids
Lipal 4L 4P	E. F. Drew & Co.	A polyethylene glycol fatty ester	Wetting Emulsifier Dispersant	Liquid	100%	Nonionic	Wetting agent, anti-gelation agent for starch pastes and suspensions, emulsifier and dispersing agent for waxes; "Lipal 4P" is a paste emulsifying agent in all types of oil-in-water emulsions both fluid and paste.
Lipal 4ML	E. F. Drew & Co.	A fatty acid ester of a poly ether alcohol	Wetting Foaming	Liquid	98%	Nonionic	Useful for wetting where salt content is high. (Formerly "Lipal 450")
Lipal 6ML	E. F. Drew & Co.	Methoxy polyethylene glycol fatty ester	Emulsifier Wetting	Liquid	100%	Nonionic	A water soluble emulsifying, solubilizing and wetting agent
Lipal 6S 15S	E. F. Drew & Co.	Polyethylene glycol fatty ester	Dispersant	Paste	100%	Nonionic	A water dispersible lubricant and hair conditioning agent; used in shampoo or hair dressing formulations; "Lipal 15S" is a waxy solid-water soluble emulsifier and anti-agglomerant.
Lipal 60	E. F. Drew & Co.	Alkyl aryl polyoxyethylene ether	Emulsifier	Liquid	100%	Nonionic	Water soluble emulsifying, solubilizing and cleansing agent
Liq. Alkamine C Conc.	Amalgamated Chemical Corp.	Alkanolamine fatty condensate	Scouring Penetrant	Liquid	100%	Nonionic	Textile scouring agent, dispersant having good wetting properties
Liquid Prell (retail)	Procter & Gamble Co.		Detergent	Liquid		Anionic	Hair shampoo
Lissapol C	Imperial Chemical Industries, Ltd.	Oleyl sodium sulfate	Detergent	Powder Paste		Anionic	A general purpose detergent recommended for power laundry use and other industries
Lissapol LS	Imperial Chemical Industries, Ltd.	Sodium oleyl p-anisidine sulfonate	Detergent	Powder Paste		Anionic	Textile, laundering etc.
Lissapol N N-380	Imperial Chemical Industries, Ltd.	Alkyl aryl ethylene oxide condensate	Detergent Wetting	Liquid	27%	Nonionic	Best on wool or as a dye leveling agent etc. for cottons
Lomar PW PWA D NCO	Jacques Wolf & Co.	Sodium salt of a condensed mono-naphthalene sulfonic acid	Dispersant	Powder	86-90%	Anionic	Dispersant for pigments in cement, ceramics, paper, etc. "Lomar PWA" is the ammonium salt. "Lomar D" is more highly polymerized than "PW" and "Lomar NCO" is designed for use at low pH values of 1-2.

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Lorridol	Beacon Chemical Co.		Detergent	Liquid			Very water soluble, (36%); uses: textiles, cosmetics, leather, etc.
Loupole W-950	Jacques Wolf & Co.	Sulfonated oil plus solvent	Detergent	Liquid	60%	Anionic	For scouring synthetics, particularly useful for graphite streaks
Lupomin	Jacques Wolf & Co.	Alkylolamide	Emulsifier Penetrant	Paste or Powder		Cationic	Textile; softening agent
Lux Liquid (retail)	Lever Brothers Co.		Detergent	Liquid			Dishwashing and fine fabric detergent
Luxolene —S	E. F. Drew & Co.	A synthetic glyceryl trioleate	Lubricant	Liquid		Nonionic	A yarn lubricant; "Luxolene S" is "Luxolene" plus nonionic emulsifiers.
Maprofix-Paste MM	Onyx Oil & Chemical Co.	Sulfated fatty alcohol blend	Detergent	Paste	44%	Anionic	Textile processing, cosmetics
Maprofix NEU LK	Onyx Oil & Chemical Co.	Technical sodium lauryl sulfate	Detergent	Powder	45%	Anionic	Textiles, household and industrial cleaning; "Maprofix Powder LK" is 90% active.
Maprofix Paste WA WAQ WAC	Onyx Oil & Chemical Co.	Sodium lauryl sulfate		Paste	29%	Anionic	Cosmetics, textile scouring
Maprofix TLS 500 513	Onyx Oil & Chemical Co.	Triethanolamine lauryl sulfate	Detergent Wetting	Liquid	44%	Anionic	Bubble baths, shampoos, industrial
Maprofix 563	Onyx Oil & Chemical Co.	Refined sodium lauryl sulfate	Detergent	Powder	97%	Anionic	Used in dentifrice, pharmaceutical and cosmetic formulations
Mapromol HSY	Onyx Oil & Chemical Co.	Sulfated fatty alcohol blend	Wetting	Paste		Anionic	Textile finishing
Maprotex	Onyx Oil & Chemical Co.	Sulfated fatty alcohol blend	Detergent	Paste		Anionic	Textile, continuous boil-off in synthetics scouring
Marasperse C CE	Marathon Corp.	Highly purified calcium lignosulfonate	Dispersant	Powder	100%	Anionic	A dispersant for sulphur, clay, pigments, insecticides, oil well drilling muds; "Marasperse CE" very similar to "C" in use but only recommended for oil well drilling
Marasperse CB	Marathon Corp.	Highly purified partially desulfonated sodium lignosulfonate	Dispersant	Powder	100%	Anionic	A dispersant for carbon blacks, dyestuffs, pigments
Marasperse N	Marathon Corp.	Highly purified sodium lignosulfonate	Dispersant Emulsifier	Powder	100%	Anionic	An emulsion stabilizer and dispersant for dyestuffs, pigments, wettable powder insecticides, industrial cleaners
Maypon AL #2 Conc.	Maywood Chemical Works	Ammonium salt of a protein condensate with lauroylchloride	Wetting Detergent	Paste	65%	Anionic	Emulsifier
Maypon 4C	Maywood Chemical Works	A protein condensation product with oleyl chloride	Detergent Wetting	Liquid	35%	Anionic	Recommended for shampoos, soapless shampoo, cream emulsions, liquid dentifrices; see also "Lamepon 4-C"
Maypon K K-903	Maywood Chemical Works	A salt of a protein condensation product with fatty acids	Detergent Wetting	Liquid	40-42%	Anionic	Dyeing bleaching and continuous boil off assistant for textiles; emulsifying agent for insecticides; "Maypon K-903" same as "Maypon K" except that its % active is 46-48% and therefore more solvent soluble
Maypon M	Maywood Chemical Works	A protein fatty acid condensate	Dispersant	Liquid	50%	Anionic	Protective agent in scouring and dyeing of wool, wool mixtures and in reprocessing of wool
Maypon OW	Maywood Chemical Works	Triethanolamine salt of "Maypon K"	Emulsifier	Paste	90%	Anionic	Oil and water soluble; emulsifier for DDT, etc.
Maypon SK (Super K)	Maywood Chemical Works	A protein condensation product with a fatty acid chloride	Wetting Detergent	Liquid	40-42%	Anionic	Scouring agent; good detergency
Medialan LL-33 LL-99	Aniara Chemicals, a sales division of General Aniline & Film Corp.	Sodium N-lauroyl sarcosinate	Detergent Foaming	Liquid	31%		Surfactant with good lathering and cleansing properties suitable for a mild shampoo and other cosmetic preparations; "LL-99", purified, dry form of "Medialan LL-33," powder and 94% active
Mentor Beads	Colgate-Palmolive Co.	Alkyl aryl sulfonate	Detergent Wetting	Bead	37%	Anionic	Industrial, cleaner for paper, insecticides, textiles

Mentor Beads	Colgate-Palmolive Co.	Alkyl aryl sulfonate	Detergent Wetting	Bead	37%	Anionic	Industrial, cleaner for paper, insecticides, textiles

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Mercerol GSR	Sandoz Chemical Works, Inc.	Mixture of naphthenic and cresylic acids	Wetting	Liquid		Anionic	For wetting in caustic soda of 30-65° Tw.
Mercerol QW	Sandoz Chemical Works, Inc.	Mixture of anionic surfactants	Wetting	Liquid		Anionic	For wetting in caustic soda of 32-58° Tw.; free from cresylic acid
Mercol-Extra -15 -25 -30	Theobald Industries	Alkyl benzene sodium sulfonate	Detergent Wetting	Bead	40%	Anionic	A built syndet base for a household cleaner; "Mercol-15", "25" and "30" differ in density only, the numbers 15, 25 and 30 refer to the density of the products in grams per 100 cc.
Mercury Formula 309 299	Theobald Industries	Contains 5¼% cationic (quaternary ammonium compound) and 3½% nonionic material	Detergent	Bead			A spray dried bead; for simultaneous sanitizing-cleaning; "299" is a built controlled suds detergent.
Merpentine	E. I. du Pont de Nemours & Co.	Modified alkyl naphthalene sulfonate	Wetting	Liquid		Anionic	Textiles; dyeing assistant
Merpol B	E. I. du Pont de Nemours & Co.	Modified alcohol sodium sulfate plus solvent	Penetrant Wetting	Liquid		Anionic	Textile scouring and leveling agent
Merpol C	E. I. du Pont de Nemours & Co.	Fatty alcohol sodium sulfate plus solvent	Penetrant	Liquid		Anionic	Textile scouring and leveling agent; higher solvent content than "Merpol B" and a slightly superior wetting agent in hard, acid or alkaline solutions
Merpol F	E. I. du Pont de Nemours & Co.	Long chain hydrocarbon sodium sulfonate	Wetting Emulsifier Softener	Liquid		Anionic	Textile dyeing assistant; paper softener
Merpol L	E. I. du Pont de Nemours & Co.	Fatty alcohol sodium sulfate plus solvent	Detergent	Liquid		Anionic	Degreasing leather
Michelene DCA	M. Michel and Co.	Alkyl amido sulfate $RCONHC_2H_4OSO_3Na$	Detergent	Powder		Anionic	Textile wet processing; alkyl chain saturated
Michelene DLF	M. Michel and Co.	Modified alkyl aryl sulfonate	Wetting Foamer	Liquid		Anionic	Textile wet processing, car washing
Michelene DLD	M. Michel and Co.	Fatty acid amide ester	Dispersant Leveler	Liquid		Nonionic	Textile dyeing
Michelene DMA	M. Michel and Co.	Alkyl amido sulfate and alkyl aryl sulfonate	Detergent Emulsifier	Powder		Anionic	Textile wet processing; compounding of household, dairy, farm specialties
Michelene DNI	M. Michel and Co.	Ethylene oxide condensate	Detergent Dispersant Emulsifier	Liquid		Nonionic	Non-electrolytic leveling
Michelene DRL DR	M. Michel and Co.	Alkyl amide sulfate	Dispersant	Liquid		Anionic	Textile wet processing; alkyl chain unsaturated
Michelene DS	M. Michel and Co.	Alkyl amido alcohol $RCONHC_2H_4OH$	Emulsifier Wetting	Liquid		Nonionic	Textile wet processing, cosmetics, wool spinning, lubricant
Michelene W	M. Michel and Co.	Alkyl naphthalene sulfonate	Wetting Penetrant	Paste Flake		Anionic	Textile wet processing, metal processing
Michelene MA-4 -8	M. Michel and Co.	Alkyl aryl sulfonate	Detergent Wetting	Flake or Powder		Anionic	Textile wet processing, and general compounding; "Michelene MA-8" is a concentrated form of "Michelene MA-4."
Michelene 10 15	M. Michel and Co.	Diamine fatty acid condensate	Softener	Paste		Cationic	Textile finishing "Michelene 15" is a refined grade of "Michelene 10."
Michelene 30	M. Michel and Co.	Amine fatty acid condensate	Softener	Paste		Nonionic	Textile finishing
Miragene S. Conc.	Miranol Chemical Co.	Fatty acid amide ether derivative	Emulsifier	Liquid	40%	Nonionic	Similar to "Miragene T" liquid conc. except in organic solvent
Miragene T Liquid Conc.	Miranol Chemical Co.	Fatty acid amide ether derivative	Wetting	Liquid	40%	Nonionic	An aqueous solution; good foam, salt free
Miragene T Powder	Miranol Chemical Co.	Fatty acid amide ether derivative	Detergent	Powder	18%	Nonionic	18% active, balance carbonates

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Miranol CL Conc.	Miranol Chemical Co.	Sulfonated fatty acid derivatives	Detergent Wetting	Liquid	42%	Nonionic	Used for general cleaners
Miranol HM Conc. CM Conc. SM Conc. JM Conc. MM Conc. DM Conc. LM Conc.	Miranol Chemical Co.		Detergent	Liquid	45%	Ampho-teric	This is a series of compounds differing in the length of the alkyl chain; condensed fatty acids used are as follows: HM-lauric, CM-coconut, SM-capric, JM-caproic, MM-myristic, DM-stearic and LM-linseed F.A.; use: shampoos, dishwashing, textile softening, paint emulsifier etc.
Miranol LF Liquid Conc.	Miranol Chemical Co.	A polyamine derivative of a sulfonated fatty acid amide	Detergent Wetting	Liquid	42%	Anionic	Cosmetics, bubble bath, shampoo; a super clear grade is also available.
Miranol LF Conc. Pdr.	Miranol Chemical Co.	Sulfonated fatty acid amide	Detergent	Powder	42%	Anionic	pH of 1% solution 7.8, non-toxic
Miranol OH	Miranol Chemical Co.	Modified lauroyl imidazolene hydroxy acetate	Foaming Wetting	Liquid	45%	Cationic	Thickener for soap solutions, silver polishes, rug shampoos
Miranol QCK	Miranol Chemical Co.	Modified lauroyl imidazolene hydroxy carbonate	Wetting Detergent	Powder	27%	Cationic	Non-toxic, cationic, dishwashing, ore flotation, textile dyeing
Miranol SS SS Conc.	Miranol Chemical Co.	Sulfonated fatty acid amide	Detergent Wetting	Powder	18%	Anionic	Uses: general industrial and household cleaners, cosmetics, textile, paper mills; "Miranol SS" conc. is 65% active
Mirapon RK Conc.	Miranol Chemical Co.	Sulfonated fatty acid amide, plus an alkyl aryl sulfonate	Detergent Wetting	Liquid	42%	Anionic	pH of 1% soln. 7.8, non-toxic, very water-soluble
Modicol N	Nopco Chemical Co.	Fatty amido condensate	Stabilizer	Liquid	100%	Nonionic	Stabilizer for natural and synthetic latex; to improve chemical resistance and viscosity uniformity
Modicol S	Nopco Chemical Co.	Sulfonated fatty product	Stabilizer	Liquid	60%	Anionic	Stabilizer for natural and synthetic latex; to improve mechanical stability and resistance to acids
Monad G	Colgate-Palmolive Co.	A sulfated monoglyceride of coconut oil	Detergent	Bead	31%	Anionic	Use: rug cleaners, bubble bath, laundry, dishwashing, etc.
Monamine AA-100 AD-100 ADD-100 ACO-100 6-92	Mona Industries, Inc.	Fatty acid alkanolamides	Detergent Wetting Emulsifier	Liquid	98/99%	Nonionic	Recommended for shampoos, liquid household detergents, dairy cleaners; for wool scouring and fulling compounds. "ACO-100", "AD-100" and "6-92" foam boosters for alkyl aryl sulfonates
Monamine 3-89 3-111 5-19 6-133	Mona Industries, Inc.	Fatty acid alkanolamides	Detergent Wetting Emulsifier	Liquid	98-99%	Nonionic	Oil soluble emulsifiers, detergents and wetting agents for dry-cleaning compounds, pigment dispersing; low foaming detergents; "3-89" is a paste at normal temperatures
Monawet MO—70 —50 —25	Mona Industries, Inc.	Dioctyl ester of sodium sulfosuccinic acid	Detergent Wetting	Paste and Liquid	70% 50% 25%	Anionic	Pastes are water solutions, liquids are water-solvent solutions. Extremely fast wetting agent
Monolaurate of Polyethylene glycol	Various	As in name	Emulsifier			Nonionic	Water dispersible; uses: cosmetics, detergents, insecticides
Monopole Oil	Jacques Wolf & Co.	Sulfonated castor oil	Emulsifier Detergent	Liquid	80%	Anionic	Designed for textile use; also used in hand cleaners, polishes, bath oils, etc.
Monosulph	Nopco Chemical Co.	Highly sulfonated castor oil	Penetrant Emulsifier	Liquid	68%	Anionic	Textile dyeing assistant; fat liquor for suede leather; paper coating evener; plasticizer for starch, glues; emulsifier for latex
Morcowet 446-C	Morton-Withers Chemical Co.		Wetting Dispersant	Liquid		Anionic	A dispersant for dyes, pigments and stearates; also a wetting agent

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Morcowet 469	Morton-Withers Chemical Co.	Alkyl naphthalene sulfonate	Dispersant Wetting	Liquid		Anionic	A general wetting agent for textiles, etc.
Morcowet X-862	Morton-Withers Chemical Co.	Alkyl naphthalene sulfonate	Wetting	Paste	60%	Anionic	Highly concentrated, very effective wetting agent for use in neutral, acid or alkaline media
Moropon IT	Moretex Chemical Products	Sodium-N-methyl-N-oleyl taurate	Detergent Wetting	Gel		Anionic	Detergent and wetting agent for scouring, dyeing and soaping off of textiles
Moropon DL	Moretex Chemical Products	Fatty amide condensate	Detergent	Liquid	100%	Nonionic	Detergent for scouring and soaping off cottons and rayons
Moropon T-6	Moretex Chemical Products	Blend of nonionic and anionic fatty esters	Detergent	Liquid		Anionic	Detergent for cleaning the newer synthetic textiles
Moropon 33	Moretex Chemical Products	Blend of nonionic fatty condensates	Detergent	Liquid		Nonionic	Detergent for viscose and rayon textiles
Morosol 4L	Moretex Chemical Products	Polyoxyethylene laurate	Emulsifier	Liquid	100%	Nonionic	Water soluble plasticizer in starch and resin sizes and finishes for textiles; emulsifier and anti-static
Morosol SL	Moretex Chemical Products	Polyoxyethylene sorbitol stearate	Emulsifier Dispersant	Solid	100%	Nonionic	Emulsifier and softener for waxes and white mineral oils for textiles
Morosol 3F	Moretex Chemical Products	Polyoxyethylene oleate	Emulsifier Wetting	Liquid	100%	Nonionic	Emulsifier for mineral spirits, oils and insecticides; dye dispersant for textiles
Morosol 31	Moretex Chemical Products	Polyoxyethylene sorbitol stearate	Emulsifier Softener	Solid	100%	Nonionic	Textile softener and emulsifier
Morosol DS	Moretex Chemical Products	Polyglycol stearate	Emulsifier	Solid	100%	Nonionic	Water insoluble emulsifier for preparing water in oil emulsions
Morowet DB	Moretex Chemical Products	Mixed salt of alkyl aryl sulfonate	Detergent Wetting	Liquid	35%	Anionic	A textile wetting agent and detergent; stable to acid and alkali, bleaching and dyeing agent
Morowet LF	Moretex Chemical Products	Sulfated fatty acid ester	Wetting Dispersant	Liquid	65%	Anionic	Textile wetting and rewetting agent for sanforizing; dye dispersant and softener
Morowet DC	Moretex Chemical Products	Dioctyl ester of sodium sulfo succinic acid	Wetting	Liquid	25%	Anionic	Wetting agent for textile applications
Morowet SN	Moretex Chemical Products	Sodium salt of an organic ester	Wetting Dispersant	Liquid	30%	Anionic	Wetting and rewetting agent; dye dispersant; alkali stable
Morpel X-803	Morton-Withers Chemical Co.	Synthetic petroleum sulfonate, water-cut, 320 mol. wt.	Emulsifier	Paste	60%	Anionic	Used as emulsifier and catalyst in fat splitting and in textile products
Morpel X-912 X-914	Morton-Withers Chemical Co.	Synthetic petroleum sulfonate, water-cut, 425 mol. wt. ("X-914" is oil cut)	Emulsifier	Paste	60%	Anionic	Fat splitting catalyst and emulsifier; also for textile products; "X-914", mol. wt. 450; base for oil soluble detergents for lube oil additives
Morpelwet Z	Morton-Withers Chemical Co.	Aliphatic ester sulfate	Wetting Penetrant	Liquid		Anionic	Textile, rewetting, softening, dye assistant
Moytol	Standard Chemical Products	Alkyl aryl sodium sulfonate	Wetting Dispersant	Liquid	30%	Anionic	Textile
Mulsor 3CW #8 #461	Synthetic Chemicals, Inc.	Long chain fatty acid ester of glycols	Emulsifier	Liquid		Nonionic	Soluble in mineral oil, kerosene and chlorinated hydrocarbons; uses: preparation of soluble cutting oils, etc.
Mulsor 224 229 384	Synthetic Chemicals, Inc.	Long chain fatty acid esters of polyethylene glycol	Emulsifier	Liquid	100%	Nonionic	Useful as emulsifiers for textile dyeing, carbonizing, acid fulling of wool; as a metal cutting oil base
Mulsor K 487 373	Synthetic Chemicals, Inc.	A blend of fatty acid esters and polyglycols with complex amino bases	Emulsifier	Liquid	100%	Cationic	Used for metal cleaning compounds and as a latex stabilizer, etc. "Mulsor 373" is a waxy solid, water insoluble, useful as thickening agent.
Myrj 45 52	Atlas Powder Co.	Polyoxyethylene stearate	Emulsifier Wetting	Solid Paste	100%	Nonionic	Oil in water emulsifiers; wide variety of uses in food, cosmetic and pharmaceutical preparations

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Myvatex 5-40 7-40 7-85	Distillation Products Div., Eastman Kodak Co.	Monoglycerides in various bases	Emulsifier	Paste	50% and 70%	Nonionic	A food emulsifier; "Myvatex 5-40", distilled monoglyceride of lard in 50% by wt. of prime lard; "Myvatex 7-40" is 70% lard derived monoglyceride in 30% prime lard; "Myvatex 7-85" is 70% monoglyceride of cottonseed oil in 30% by wt. of shortening.
Myverol Type 18-00 18-05 18-30 18-70 18-85 18-90	Distillation Products Div., Eastman Kodak Co.	Monoglycerides purified by molecular distillation	Emulsifier	Solid	90%	Nonionic	"Myverol 18-00" is from refined lard, "18-05" from triple pressed stearic acid and "Myverol 18-85" from cottonseed oil, etc.; use: as a food emulsifier
Naccolene A Conc.	National Aniline Div., Allied Chemical & Dye Corp.	Modified petroleum sulfonate	Detergent	Paste		Anionic	Emulsifying agent for use in organic liquids
Nacconol DB	National Aniline Div., Allied Chemical & Dye Corp.	Alkyl aryl sulfonate	Detergent Wetting	Bead	40%	Anionic	Dense bead of high physical strength; suitable for alkaline mixtures
Nacconol EP	National Aniline Div., Allied Chemical & Dye Corp.	Alkyl aryl sulfonate	Wetting			Anionic	Special for electroplating baths
Nacconol FSNO	National Aniline Div., Allied Chemical & Dye Corp.	Alkyl aryl sulfonate	Detergent			Anionic	Slight taste makes product acceptable for cosmetic or personal use
Nacconol HG	National Aniline Div., Allied Chemical & Dye Corp.	Alkyl aryl sulfonate	Detergent	Flake	60%	Anionic	Used in salt water soaps, alkaline mixtures and foaming compositions
Nacconol MX Granular Unimesh	National Aniline Div., Allied Chemical & Dye Corp.	Alkyl aryl sulfonate	Detergent	Granule	40%	Anionic	Suitable for alkaline mixtures; all through 20 mesh; "Nacconol MX" unimesh-fine granule; especially suitable for alkaline mixtures; all through 30 mesh
Nacconol NR	National Aniline Div., Allied Chemical & Dye Corp.	Alkyl aryl sulfonate	Detergent Wetting	Flake	40%	Anionic	Water solubility, 5% at 15°C., 21% at 100°C; one of best alkyl aryl detergents, side chain single and long; surface tension of 0.15% and 25° 33 dynes/cm
Nacconol NRSF	National Aniline Div., Allied Chemical & Dye Corp.	Alkyl aryl sulfonate	Detergent Wetting	Flake	92%	Anionic	
Nacconol SL	National Aniline Div., Allied Chemical & Dye Corp.	Alkyl aryl sulfonate	Detergent Wetting	Liquid	35%	Anionic	Total solids above 40%; critical solubility temperature 0°C
Nacconol Z	National Aniline Div., Allied Chemical & Dye Corp.	Alkyl aryl sodium sulfonate	Detergent Wetting	Flake	85%	Anionic	Differs from "Nacconol NR" in active organic content
Nacconol 60 S	National Aniline Div., Allied Chemical & Dye Corp.	Alkyl aryl sulfonate, organic salt	Detergent Wetting	Liquid	60%	Anionic	Best material for shampoos and household detergents
Nacconol Beads	National Aniline Div., Allied Chemical & Dye Corp.	Alkyl aryl sulfonate	Detergent	Bead	40%	Anionic	Low density bead for bubble bath preparations
Naccosol A	National Aniline Div., Allied Chemical & Dye Corp.	Sodium alkyl naphthalene sulfonate	Hydrotrope	Flake		Anionic	Solubilizing agent
Naccotan A	National Aniline Div., Allied Chemical & Dye Corp.	Alkyl aryl sodium sulfonate	Dispersant	Flake		Anionic	Very water soluble, used in chrome tanning leather and for dispersion of solids and tars
Naxonate G	Pedlow-Nease Chemical Co.	Sodium xylenesulfonate	Hydrotrope Penetrant	Flake	95%	Anionic	Useful in extraction due to hydrotropic properties
Naxonate 4L	Pedlow-Nease Chemical Co.	Sodium xylenesulfonate	Hydrotrope Penetrant	Liquid	40%	Anionic	Useful in extraction due to hydrotropic properties
Negamine 142A	Synthetic Chemicals, Inc.	Amine ester of a long chain fatty acid	Wetting Emulsifier	Liquid	50%	Cationic	Textile finishing and dyeing agent
N-Methyltaurine	Antara Chemicals, a sales division of General Aniline & Film Corp.	As in name	Intermediate	Liquid	27-31%	Amphoteric	Intermediate used in the manufacture of detergents, dyestuffs, pharmaceuticals and other organic chemicals

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
			Wetting	Powder	65%	Anionic	Water soluble textile processing agent stable

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Nekal BA-75	Antara Chemicals, a sales division of General Aniline & Film Corp.	Sodium alkyl naphthalene sulfonate	Wetting Emulsifier Dispersant	Powder	65%	Anionic	Water soluble textile processing agent stable to acid, alkali and metal ions; also used in the leather, paint, printing, agricultural chemical and rubber industries
Nekal BX-78	Antara Chemicals, a sales division of General Aniline & Film Corp.	Sodium alkyl naphthalene sulfonate	Wetting Dispersant	Powder		Anionic	Acid and alkali stable; wetting agent and penetrant in various phases of textile processing; also used in the agricultural chemical, paper, paint and rubber industries
Nekal NF	Antara Chemicals, a sales division of General Aniline & Film Corp.	Alkyl naphthalene sulfonate	Wetting Dispersant	Liquid		Anionic	A low foaming wetting and penetrating agent for dyeing with vat, naphthol, sulfur and direct colors; dispersant for solids in oils; water soluble; stable to acids, alkalies and hard water
Nekal NS	Antara Chemicals, a sales division of General Aniline & Film Corp.	Sulfonated aliphatic polyester	Wetting Rewetting Dispersant	Liquid	22%	Anionic	Water soluble; wetting and rewetting agent in neutral systems; used in padding direct dyes or pigment padding with vat colors
Nekal WS-21 WS-25	Antara Chemicals, a sales division of General Aniline & Film Corp.	Sulfonated aliphatic polyester	Wetting Rewetting Dispersant	Liquid	18-20%	Anionic	Wetting and rewetting agent in various phases of textile processing; effective in both hot and cold solution. "Nekal WS-25" more concentrated solution of "Nekal WS-21"
Nekal WS-99	Antara Chemicals, a sales division of General Aniline & Film Corp.	Sulfonated aliphatic polyester	Wetting Rewetting Dispersant	Flake	95%	Anionic	Concentrated form of "Nekal WS-21"; wetting agent for agricultural toxicants, dispersible pigments, sizing and finishing agents
Neolene 210 212 220	Sharples Chemicals, Inc., a division of Pennsylvania Salt Manufacturing Co.	Nonylnaphthalene	Intermediate		100%		Not surface active compounds; they are bases etc. "220"—dinonylnaphthalene and "212"— a blend of "210" and "220."
Neomerpin	E. I. du Pont de Nemours & Co.	Derivative of alkyl naphthalene sulfonate	Wetting	Liquid		Anionic	Very water-soluble; stable to weak acids and alkalis
Neomerpin N	E. I. du Pont de Nemours & Co.	Alkylated naphthalene sulfonic acid	Wetting	Liquid		Anionic	Textile; dyeing, carbonizing; leather; tanning
Neopone R	Ultra Chemical Works	Ethylene oxide fatty acid condensate	Wetting Dispersant	Liquid	100%	Nonionic	Textile, leather, scouring agent
Neopone LO Beads	Ultra Chemical Works	Ethylene oxide condensate plus builders	Detergent	Beads		Nonionic	Low sudsing detergent designed for automatic laundry machines; superior detergency on cotton and nylon
Neovadin AN AL A High Conc.	Ciba Co.	An ethylene oxide condensate of a fatty acid	Dispersant Penetrant	Paste		Nonionic	Used as a textile dyeing assistant etc.
Neutronyx 268	Onyx Oil & Chemical Co.	Polyethylene glycol (300) distearic acid ester	Emulsifier Opacifier	Solid	98%	Nonionic	Useful in creme shampoos, lotions etc.
Neutronyx 330	Onyx Oil & Chemical Co.	Polyethylene glycol (600) soybean fatty acid ester	Dispersant Emulsifier	Liquid	100%	Nonionic	Cosmetics, salt water detergent, textile assistant
Neutronyx 331 332 333	Onyx Oil & Chemical Co.	Fatty acid ester of a poly ether alcohol	Detergent Emulsifier Wetting	Liquid	100%	Nonionic	Cosmetics, insecticides, general cleaners
Neutronyx 600	Onyx Oil & Chemical Co.	Aromatic polyglycol ether condensate	Detergent Wetting	Liquid	100%	Nonionic	General purpose detergent; for industrial and home uses
Neutronyx 611	Onyx Oil & Chemical Co.	Alkyl-phenol, polyglycolether	Detergent	Liquid	100%	Nonionic	Used for metal cleaning and pickling, wetting agent in paper mills, mechanical washing and spraying machines, detergent sanitizers
Neutronyx 834	Onyx Oil & Chemical Co.	Polyethylene glycol (300) oleic acid ester	Emulsifier	Liquid	100%	Nonionic	Water dispersible; oil in water emulsifier
Nilo VO-51	Sandoz Chemical Works, Inc.	Ethylene oxide condensate	Emulsifier	Liquid		Nonionic	Emulsifier for highly refined mineral oils
Ninate 402	Ninol Laboratories, Inc.	Calcium alkyl aryl sulfonate	Emulsifier	Liquid		Anionic	Used in blends with nonionics to make insecticide emulsifiers

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Ninate 411	Ninol Laboratories, Inc.	Amine alkyl aryl sulfonate	Emulsifier	Liquid	92%	Anionic	Oil soluble sulfonate; forms clear blends of water and kerosene
Ninex 21	Ninol Laboratories, Inc.	Amido sulfonate complex	Detergent	Liquid	60%	Anionic	Liquid dishwashing detergent with stable foam
Ninex 23	Ninol Laboratories, Inc.	Amido sulfonate complex	Detergent	Liquid	90%	Anionic	Lathering agent for shampoos and cleaners; viscous after twentyfold dilution
Ninex 300	Ninol Laboratories, Inc.	Triethanolamine dodecyl benzene sulfonate	Detergent	Liquid	60%	Anionic	Salt-free sulfonate for concentrated liquid cleaners
Ninex 303	Ninol Laboratories, Inc.	Sodium xylene sulfonate	Hydrotrope	Liquid	40%	Anionic	Used to help dissolve detergents in electrolyte solutions
Ninol 128 128 Extra	Ninol Laboratories, Inc.	A fatty acid alkanolamide	Detergent	Liquid	100%	Nonionic	For making viscous cleaner-sanitizers; amide content about 65%; "Ninol 128 Extra" is coconut oil derived having an amide content of 80%
Ninol 201 713 HA10	Ninol Laboratories, Inc.	A fatty acid alkanolamide	Emulsifier	Liquid		Nonionic	A group of oil-soluble emulsifiers for general industrial use; "Ninol 713" is a wax
Ninol 737	Ninol Laboratories, Inc.	A fatty acid alkanolamide	Detergent Wetting	Liquid	100%	Nonionic	Textiles, laundry, furs, cosmetics, etc.
Ninol 1001	Ninol Laboratories, Inc.	A fatty acid alkanolamide	Detergent	Liquid	100%	Nonionic	Used as deduster for alkaline powders; gives clear solutions when these powders are dissolved in water
Ninol 1281	Ninol Laboratories, Inc.	A fatty acid alkanolamide	Detergent	Liquid	100%	Nonionic	A base for synthetic and soap-synthetic floor cleaners; gives viscous non-rusting solutions
Ninol—2012 —2012 Extra	Ninol Laboratories, Inc.	A fatty acid alkanolamide	Detergent	Liquid	100%	Nonionic	A detergent used for thickening solutions of other synthetics, as in shampoos; "Ninol 2012 Extra" is a coconut fatty acid diethanolamide containing 90% amide
Ninol AA62 AA62 Extra	Ninol Laboratories, Inc.	Lauric diethanolamide	Detergent	Wax	100%	Nonionic	Foam stabilizer for alkyl aryl sulfonates or lauryl sulfonates; "Ninol AA62 Extra" is a product very high in amide content (90%).
Ninol AD31	Ninol Laboratories, Inc.	Lauric isopropanolamide	Detergent	Flake	100%	Nonionic	Foam stabilizer for alkyl aryl sulfonates or lauryl sulfonates
Ninol CB60	Ninol Laboratories, Inc.	A fatty acid alkanolamide	Emulsifier	Wax		Nonionic	An opacifier and pearlescer for liquid cream shampoos
Ninox BDO BFO BJO	Ninol Laboratories, Inc.	Alkylphenol polyglycol ether	Emulsifier Detergent	Liquid	100%	Nonionic	Emulsifier for W/O emulsions; "BFO" oil soluble emulsifier for kerosene, etc.; "BJO" also detergent; acid and alkali stable general purpose nonionic
Nionine PG	Amalgamated Chemical Corp.	Polyethylene glycol ester	Emulsifier Wetting	Liquid	25%	Nonionic	Textile processing, hosiery and piece goods dyeing and scouring
NNO NNOR	Atlas Powder Co.	Glycerol mannitan laurate	Wetting	Liquid	100%	Nonionic	A special product for spreading insecticides on leaves and foliage of plants for contact stomach poisons
Nonic 218	Sharples Chemicals, Inc., a division of Pennsylvania Salt Manufacturing Co.	Polyethylene glycol tertdodecyl thioether	Detergent Wetting Emulsifier	Liquid	95%	Nonionic	Textiles, cosmetics, dishwashing, industrial cleaning; powerful grease-cutter
Nonic 234	Sharples Chemicals, Inc., a division of Pennsylvania Salt Manufacturing Co.	Polyethylene glycol tertdodecyl thioether	Detergent Wetting	Liquid	85%	Nonionic	Applications same as for "Nonic 218", but "Nonic 234" is more powerful in wetting power.
Nonic 260 261	Sharples Chemicals, Inc., a division of Pennsylvania Salt Manufacturing Co.	Polyethylene glycol tertdodecyl thioether	Emulsifier Wetting	Liquid	98%	Nonionic	Effective oil-in-water emulsifiers, faster wetting action than "Nonics 218" or "234"; "Nonic 261" is similar to "Nonic 260" but specially compounded for metal processing.

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
					100%	Nonionic	High stability in presence of acids and oxidizing

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Nonic 300	Sharples Chemicals, Inc., a division of Pennsylvania Salt Manufacturing Co.	Polyethylene glycol alkylphenyl ether	Detergent Wetting Emulsifier	Liquid	100%	Nonionic	High stability in presence of acids and oxidizing agents; used in processing textile fibers and finished goods; industrial, institutional, household cleaners, etc.
Nonisol 100	Geigy Chemical Corp.	A polyethylene glycol of lauric acid ("Glycol-400")	Wetting Emulsifier	Liquid	100%	Nonionic	Water soluble; insoluble in kerosene and xylene; uses: cosmetics as emulsifier, thickening agent; textiles, hand cleaners, etc.
Nonisol 110	Geigy Chemical Corp.	A polyethylene glycol of lauric acid ("Glycol-400" plus "600" possibly)	Wetting Emulsifier	Liquid	100%	Nonionic	Similar to "100" with glycol (600) probably replacing the 400 in part. Soluble in xylene. Uses: Coning oil and also as a fat emulsifier.
Nonisol 200	Geigy Chemical Corp.	A polyethylene glycol (400) ester of oleic acid	Wetting Emulsifier	Liquid	100%	Nonionic	Water dispersible, soluble in most organic solvents; insoluble in kerosene; emulsifier for kerosene; use: cosmetics, insecticidal sprays, etc.
Nonisol 210	Geigy Chemical Corp.	A polyethylene glycol ester of oleic acid	Emulsifier		100%	Nonionic	Soluble in kerosene; for uses see manufacturer's data
Nonisol 250	Geigy Chemical Corp.	A polyethylene glycol (1000) ester of oleic acid	Solubilizer Hydrotrope	Paste	100%	Nonionic	Similar to "Nonisol 150" with oleic replacing lauric; a solubilizing agent
Nonisol 300	Geigy Chemical Corp.	A polyethylene glycol (400) ester of stearic acid	Emulsifier Wetting	Paste	100%	Nonionic	M.P. 30° C. Soluble in xylene; dispersible in water; insoluble in kerosene; a starch stabilizer
Nopalcol 1-L 6-L 10-L	Nopco Chemical Co.	Polyoxyethylene mono-laurate	Emulsifier	Liquid	100%	Nonionic	Emulsifier; defoamer in low boiling organic distillations. "Nopalcol 6-L" dye leveller; viscosity stabilizer for Neoprene latex and for starch solutions; "Nopalcol 10-L" is an emulsifier for producing high solids solvent or plasticizer emulsions.
Nopalcol 1-O 6-O	Nopco Chemical Co.	Polyoxyethylene mono-oleate	Emulsifier	Liquid	100%	Nonionic	Emulsifier; coupling agent in soluble oils; "Nopalcol 6-O", emulsifier; wetting agent for oil phase systems; dye leveler for nylon hosiery
Nopalcol 1-S	Nopco Chemical Co.	Polyoxyethylene mono-stearate	Emulsifier	Solid	100%	Nonionic	For emulsifiable pastes and creams
Nopalcol 811	Nopco Chemical Co.	Polyoxyethylene fatty amido amine	Detergent	Liquid	100%	Nonionic	Outstanding detergent for cotton and wool
Nopalcol AO-43	Nopco Chemical Co.	Polyoxyethylene oleic amide	Wetting	Liquid	100%	Nonionic	Electroplating bath wetting agent
Nopalcol BL-13 BL-18	Nopco Chemical Co.	Polyoxyethylene lauric amido amine	Emulsifier	Liquid	100%	Cationic	Emulsifier and coupling agent in soluble oils; "BL-18" is detergent. Excellent detergency in high salt content or high temperature media
Nopalcol BO-18	Nopco Chemical Co.	Polyoxyethylene oleic amido amine	Detergent Penetrant	Liquid	100%	Cationic	Dye leveling agent; general purpose detergent
Nopalcol UD UF	Nopco Chemical Co.	Modified polyoxyethylene ether	Detergent	Liquid	100%	Nonionic	Low foaming nonionic with outstanding detergency for automatic laundries and household products; "Nopalcol UF" is very low foaming detergent for automatic laundry formulations
Nopco 1067-A	Nopco Chemical Co.	Alkyl naphthalene sulfonate	Wetting	Liquid	28%	Anionic	Wetting agent in acid media; pickling bath additive
Nopco 1179	Nopco Chemical Co.	Fatty amido condensate	Detergent	Liquid	100%	Nonionic	Wool and worsted fulling and scouring; general purpose detergent
Nopco 1186A	Nopco Chemical Co.	Sulfonated alkyl ester	Wetting Emulsifier	Liquid	65%	Anionic	Wetting agent for treating fibrous materials; emulsifier in latex manufacture
Nopco 1187-X	Nopco Chemical Co.	Sulfonated naphthalene condensate	Dispersant	Powder	95%	Anionic	Pigment dispersing agent and grinding aid, with viscosity reducing powers; synthetic retanning agent
Nopco 1285	Nopco Chemical Co.	Highly sulfated fatty ester	Wetting	Liquid	65%	Anionic	Low foaming penetrant, textile dyeing assistant
Nopco 1408	Nopco Chemical Co.	Sulfated castor oil soap	Emulsifier	Liquid	47%	Anionic	Emulsifier for pine oil and solvents, etc.

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Nopco 1440	Nopco Chemical Co.	Sulfonated oil-pine oil blend	Penetrant	Liquid	75%	Anionic	Penetrant, plasticizer and lubricant in warp sizing, etc.
Nopco 1471	Nopco Chemical Co.	High sulfated vegetable oil	Emulsifier	Liquid	68%	Anionic	Emulsifier for mineral and vegetable oils
Nopco 1479-D	Nopco Chemical Co.	Modified amido condensate	Detergent	Liquid	82%	Nonionic	Heavy duty fulling and scouring agent for woolens and worsteds
Nopco 1525	Nopco Chemical Co.	Alkyl phenol ethylene oxide condensate	Detergent Wetting Emulsifier	Liquid	100%	Nonionic	Emulsifier for oils, polymerizations; assistant for dyeing and scouring textiles
Nopco 1658-C	Nopco Chemical Co.	Modified amido condensate	Detergent	Liquid	33%	Nonionic	Wool and worsted fulling and scouring
Nopco 2031	Nopco Chemical Co.	Sulfated hydroxy stearic acid	Wetting Emulsifier	Liquid	60%	Anionic	Acid stable emulsifier; textile penetrant
Nopco 2125	Nopco Chemical Co.	Polyoxyethylene amido condensate	Wetting	Liquid	100%	Cationic	Sulfuric acid stable wetting agent; for phosphate, clay processing
Nopco 2272-R	Nopco Chemical Co.	Highly sulfated fatty ester	Wetting	Liquid	65%	Anionic	To improve wetting in paper towels, in latex impregnation and dipping, in metal treating, and in textile dyeing
Nopco Bond O	Nopco Chemical Co.	Ethylene oxide condensate of a fatty amine	Wetting	Liquid	100%	Cationic	A bonding agent for asphalt and stone
Nopcogen 11-L 12-L	Nopco Chemical Co.	Lauric alkylolamide	Softener	Solid	100%	Cationic	M.P. 64° C.; textile softener; dispersible in water; "Nopcogen 12-L" emulsifier, liquid, an emulsifier for soluble oils; good anti-static properties
Nopcogen 11-O	Nopco Chemical Co.	Oleic alkylolamide	Emulsifier	Solid	100%	Cationic	M.P. 48° C.; w/o emulsions with mineral, vegetable oils
Nopcogen 14-L	Nopco Chemical Co.	Lauric alkylolamine condensate	Detergent Wetting Emulsifier	Liquid	100%	Cationic	General purpose detergent, wetting agent
Nopcogen 14-S	Nopco Chemical Co.	Stearic alkylolamine condensate	Softener	Solid	100%	Cationic	M.P. 48° C.; textile softener
Nopcogen 16-L	Nopco Chemical Co.	Lauric polyamine condensate	Emulsifier	Solid	100%	Cationic	M.P. 60° C.; textile finishing agent
Nopcogen 16-O	Nopco Chemical Co.	Oleic polyamine condensate	Emulsifier	Solid	100%	Cationic	M.P. 44° C.; w/o emulsions with mineral, vegetable oils
Nopcogen 16-S	Nopco Chemical Co.	Stearic polyamine condensate	Softener	Solid	100%	Cationic	M.P. 80° C.; textile softener, synthetic wax
Nopcogen 20-O	Nopco Chemical Co.	Oleic polyamine condensate	Wetting Emulsifier	Solid	100%	Cationic	M.P. 38° C.; ore flotation agent; asphalt additive
Nopcogen RP	Nopco Chemical Co.	Sulfonated amine condensate	Detergent	Liquid	75%	Anionic	Hard water resistant foam-stabilizer for liquid shampoos, dishwashing formulations
No-Strip	Maguire Industries, Inc.	An amine condensation product with tall oil	Emulsifier	Liquid	37½%	Cationic	Designed for asphalt binding to wet stone; Approximately 1-1½% is required
Novonacco	National Aniline Division, Allied Chemical & Dye Corp.	Modified sodium alkyl naphthalene sulfonate	Wetting			Anionic	Textiles
Novonacco NN	National Aniline Division, Allied Chemical & Dye Corp.	Alkyl naphthalene sulfonic acid	Wetting			Anionic	Textile, wool carbonizing
NSAE—Powder Paste	Onyx Oil & Chemical Co.	Sodium alkyl naphthalene sulfonate	Wetting Emulsifier	Powder Paste	85% 43%	Anionic	Textile processing; dye leveling; electroplating, wettable sulfur
Nullapon BF Acid	Antara Chemicals, a sales division of General Aniline & Film Corp.	Ethylenediamine tetra acetic acid	Sequesterant	Powder	100%	Anionic	Requires addition of alkali for solubilization in water or amines for solubilization in oil
Nullapon BF-13	Antara Chemicals, a sales division of General Aniline & Film Corp.	Tetrasodium salt of ethylenediamine tetra acetic acid	Sequesterant	Liquid	37%	Anionic	Aqueous solution of tetrasodium ethylenediamine tetraacetate; clarifier for liquid soaps and shampoos; anti-oxidant for fats and oils to prevent rancidity, etc.

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Nullapon BF-78	Antara Chemicals, a sales division of General Aniline & Film Corp.	Tetrasodium salt of ethylenediamine tetra acetic acid	Sequestrant	Flake	78%	Anionic	In addition to uses noted for "BF-13", this product is used as a stabilizer for vinyl plastics, as a component in soaker alkali compounds, as a water softener for sanitizer formulations.
Nullapon FE-12	Antara Chemicals, a sales division of General Aniline & Film Corp.		Sequestrant	Liquid	27%	Anionic	Preferentially chelates iron in solutions; leather dyeing
Nullapon NaFe-13	Antara Chemicals, a sales division of General Aniline & Film Corp.	Technical sodium ferric ethylene-diamine tetra acetate		Powder		Anionic	Iron chelate used to correct iron deficiency in many field and ornamental crops
Nycon Lube AG	Laurel Soap Co.	Nonionic fatty ester	Detergent Wetting	Liquid	100%	Anionic	Textile wetting and detergent use
Octab— —C —CT	Fairfield Laboratories	Octadecyl dimethyl benzyl ammonium chloride	Germicide	Crystal	100%	Cationic	Pharmaceutical grade; phenol coefficient at 37°C against S.A. 200-250; "Octab C" is the commercial grade, "CT" the technical grade
Octimet	Fairfield Laboratories	Octadecyl dimethyl ethyl ammonium bromide	Germicide	Crystal	100%	Cationic	Fungicide; phenol coefficient at 37°C against S.A. 150-200
Olapon A RA	Laurel Soap Co.	Alkyl aryl amine and nonionic blend	Detergent Wetting	Liquid		Anionic	Textile scouring and wetting agent
Olapon WA	Laurel Soap Co.	Sodium lauryl sulfate	Detergent Wetting Dispersant	Paste	29%	Anionic	Textile detergent and wetting agent
Ondal A	E. I. du Pont de Nemours & Co.	Blended product	Detergent	Powder		Anionic	Contains detergent plus oxidizing chemicals to develop vat dyes; textiles
Onyxide	Onyx Oil & Chemical Co.	Alkenyl dimethyl ethyl ammonium bromide	Germicide	Paste	75%	Cationic	The alkenyl group is a mixture of aliphatic hydrocarbon radicals, principally unsaturated, containing approximately x18 carbons. A sanitizing agent, principally an algaecide for water systems
Onyx-ol 336	Onyx Oil & Chemical Co.	Lauric acid alkanolamine condensate	Detergent Wetting Dispersant	Liquid	97%		Foam stabilizer especially in household liquid detergents
Onyx-ol 345	Onyx Oil & Chemical Co.	Coconut fatty acid amide condensate	Detergent	Liquid	99%	Nonionic	Exceptionally low eye irritation properties; cosmetic formulations
Onyx-ol 368	Onyx Oil & Chemical Co.	A lauric acid isopropanol amide	Stabilizer	Powder	97%	Nonionic	Water-insoluble; soluble in solutions of sulfated fatty alcohols, sulfonated oils, etc.
Onyx-ol 9162	Onyx Oil & Chemical Co.	Coconut fatty acid alkanolamine condensate	Detergent	Liquid	96%	Nonionic	Wool scouring, auxiliary emulsifying agent, automobile washing
Onyxsan 200A 400	Onyx Oil & Chemical Co.		Softener	Paste	40%	Cationic	Lether softener; egg yolk substitute in leather processing
Onyxsan H HSB LG	Onyx Oil & Chemical Co.		Softener	Paste	50%	Cationic	"HSB" is 25% active, "LG", 45%. Textile softener, hair rinses, substantive to cellulose
Onyxsan S S-50	Onyx Oil & Chemical Co.		Softener	Paste	50%	Cationic	S-50 is 25% active. Textile softener, component in resin finishes
Oratol L 48	Jacques Wolf & Co.	Sodium salt of a sulfoester of a fatty alkanolamide	Detergent Wetting	Paste	25%	Anionic	Water soluble, kerosene insoluble
Oronite Quaternary ATM-50	Oronite Chemical Co.	N-alkyl benzyl-N trimethyl ammonium chloride	Germicide	Liquid	50%	Cationic	As a general germicidal agent
Oronite Wetting Agent	Oronite Chemical Co.	Alkyl aryl sodium sulfonate	Wetting Emulsifier	Paste	66%	Anionic	Agricultural sprays, textile and leather cleaning and dyeing, fruit processing, metal treatment

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Oronite Wetting Agent S	Oronite Chemical Co.	Alkyl aryl sulfonate	Detergent Emulsifier	Paste	52%	Anionic	Uses: fruit peeling and washing, textile and leather dyeing, and washing rugs and upholstery; all-purpose emulsifier and wetting agent
Orthemul	Fine Organics, Inc.		Emulsifier	Liquid			An emulsifier for orthodichlorobenzene for use in controlling bacterial decomposition in garbage dumps
Orthocen K	American Aniline & Extract Co.	Sulfated cresylic acid	Wetting Penetrant			Anionic	Textile
Orvus AB Granules	Procter & Gamble Co.	Sodium alkyl aryl sulfonate	Detergent Wetting Dispersant	Granules	40%	Anionic	Textile processing and industrial applications
Orvus ES Paste	Procter & Gamble Co.	Modified sodium alkyl sulfate	Detergent Wetting Emulsifier	Paste		Anionic	Textile processing, cosmetic, and industrial applications
Orvus Extra Granules	Procter & Gamble Co.	Essentially sodium alkyl sulfate	Detergent	Granules		Anionic	Built heavy duty type detergent and cleaner for laundry, textile and industrial applications
Orvus Hytemp Granules	Procter & Gamble Co.	Essentially sodium alkyl sulfate	Detergent	Granules		Anionic	Built heavy duty type detergent and cleaner for laundry, textile, and industrial applications; similar to "Orvus Extra Granules" except particularly effective at high temperatures
Orvus K Liquid	Procter & Gamble Co.	Modified alkyl sulfate	Detergent Wetting Dispersant Emulsifier	Liquid		Anionic	An efficient detergent, sudsing, and wetting agent for cosmetic and industrial applications and textile processing
Orvus WA Paste	Procter & Gamble Co.	Sodium alkyl sulfate	Detergent Wetting Emulsifier	Paste		Anionic	Cosmetic and industrial applications
Oxydol (retail)	Procter & Gamble Co.		Detergent	Granular		Anionic	Built all-purpose detergent
P-150	Refined Products Corp.	An ethylene oxide derivative of a tertiary amine	Detergent	Gel		Nonionic	A cleaner for steel plate pickling baths, textile detergent and anti-static agent
Padasol	Jacques Wolf & Co.	Sodium alkyl aryl sulfonate	Wetting Dispersant	Liquid		Anionic	Textiles as a dyestuff dispersant
Parnol 85 JD Liquid J	Jacques Wolf & Co.	Dodecylbenzene sodium sulfonate	Detergent	Solid Bead Liquid	85% 25% 40%	Anionic	Stable to alkali, fairly stable to acids; "Parnol JD" is a 25% active water solution of above, and "Parnol Liquid J" is a 40% active water solution.
Peg-42	Glyco Products Co.	Polyoxyethylene stearate	Emulsifier Dispersant	Paste	100%	Nonionic	Food emulsifying and dispersing agent
Pegmol	Fred'k. A. Stresen-Reuter, Inc.	Polyethylene glycol 400 monolaurate	Emulsifier	Liquid	100%	Nonionic	This product has been designed for the paint latex emulsion field.
Pegy	Standard Chemical Products, Inc.	Polyglycol ester of fatty acids	Emulsifier	Liquid	100%	Nonicnic	General emulsifier for oil and solvents
Penequik	L. Sonneborn Sons, Inc.	Sulfonated ester	Wetting Penetrant			Nonionic	Textiles, as a softening agent
Penetrant 60	Beacon Chemical Co.	Sodium and potassium salts of sulfonated dicarboxylic acids	Wetting Penetrant			Anionic	Textiles, paper, leather
Penetrant 65	Beacon Chemical Co.	Sodium and potassium salts of sulforicinoleic acid	Wetting Penetrant			Anionic	Textiles, paper, leather, etc.
Penetrant 100	Proven Products		Emulsifier Wetting	Liquid	99%	Nonionic	Use: leather manufacture
Penetrant 120	Apex Chemical Co.	A sulfated fatty ester	Penetrant Wetting Emulsifier	Liquid	25%	Anionic	A textile lubricant

Trade Name	Manufacturer	Class and Formula	Main Uses	Form	% Conc.	Type	Remarks
Penetrator WH-9	Apex Chemical Co.	Amino condensate	Wetting Penetrant Emulsifier	Liquid	100%	Nonionic	A wetting agent for the textile trade
Penetrolin AC	Arkansas Co.	Alkyl naphthalene sodium sulfonate	Wetting Penetrant	Liquid	30%	Anionic	Textile, penetrant for wool carbonizing
Penetronyx D-30	Onyx Oil & Chemical Co.	Alkyl dimethyl hydroxy ethyl ammonium chloride	Wetting	Liquid	30%	Cationic	In electroplating as a wetting agent
Pensyn L206 L65	Peck's Products Co.	Alkyl aryl sodium sulfonate	Detergent	Liquid	26%	Anionic	An industrial cleaner; "Pensyn L65" is same with 65% active content.
Pentergent T	Jacques Wolf & Co.	Alkyl aryl sulfonate	Detergent Wetting	Powder	40%	Anionic	Textile scouring and dye leveling
Perclo X-180 X-390	Perry Brothers, Inc.		Emulsifier	Liquid		Nonionic	An alkali and acid stable opacifier for use in cold wave and in other non-edible emulsifier uses
Perk (retail)	Armour and Co.	An alkyl aryl sulfonate plus builders	Detergent	Powder		Anionic	A built all-purpose household detergent
Perma Kleer-50	Refined Products Corp.	Sodium salt of a polyaminocarboxylic acid	Sequestrant	Liquid	45%	Anionic	Forms complex compounds with Fe, Ca, Mg, etc.
Perma Kleer-80 SP OH	Refined Products Corp.	Sodium salt of a polyaminocarboxylic acid	Sequestrant	Liquid and Solid	95%	Anionic	Special for sequestering iron and calcium; "Perma Kleer-SP" is a 95% active particularly designed for iron sequestering. "Perma Kleer-OH" is a 63% active solution for iron and calcium in caustic solution.
Permalene A-100 A-118 A-120 A-122 A-134	Refined Products Corp.	Fatty amide condensate, fatty esters and salts of fatty alcohol sulfates	Detergent Emulsifier	Liquid	100%	Nonionic	Textile scouring and wetting agents of various compositions
Perma Par-ACA-100 Par-R	Refined Products Corp.	Substituted long chain secondary amine	Detergent Softener	Solid	100%	Cationic	Textile softening and acid scouring agent; "Parma Par-R" is 22% active of above in paste form.
Persol 40	Perkins Soap Co.	Igepon type detergent	Detergent Emulsifier	Liquid	40%	Anionic	Acid and alkali stable; uses: general household and industrial cleaner
Petro AA	Petrochemicals Co.	Alkyl aryl sodium sulfonate	Detergent	Powder Liquid	98% 50%	Anionic	A hard surface detergent for metal cleaning, oil well acidizing, household cleaners, etc.
Petro P	Petrochemicals Co.	Alkyl aryl sodium sulfonate	Detergent	Liquid, Solid	50% 95%	Anionic	A hard surface detergent; slightly higher foam power than "Petro AA"
Petrobase 1 2 3	Pennsylvania Refining Co.	Petroleum sulfonate base	Emulsifier	Liquid		Anionic	Compounded emulsifier for petroleum oils for a variety of applications, etc.
Petrobase 210	Pennsylvania Refining Co.		Emulsifier	Liquid		Anionic	All-purpose rust preventive base
Petromix -9	L. Sonneborn Sons, Inc.	A modified petroleum sulfonate, containing soaps	Emulsifier	Liquid		Anionic	Used wherever a soluble oil base emulsifying agent is required
Petronate Hl L K	L. Sonneborn Sons, Inc.	A petroleum sulfonate	Wetting	Liquid	62%	Anionic	A group of products differing in molecular weight; made from by-products of oil refining; useful in cutting oils, rust preventives, leather oils, lube oil additives, etc.
Petrosul 500 545 742 745 750	Pennsylvania Refining Co.	Petroleum sulfonate	Emulsifier	Liquid	50% and 62%	Anionic	Oil-soluble, highly refined, for use as solubilizer and rust preventive; "Petrosul 545" is 50% active, rest 62%. "Petrosul 742" used for formulating dry cleaning compounds for textile specialties, etc.
Petrowet R	E. I. du Pont de Nemours & Co.	Saturated hydrocarbon sulfonate	Detergent Wetting	Liquid		Anionic	Wetting and penetrating agent in high concentration, electrolyte solutions; acidizing oil wells

(To be Continued)

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Liquid 73%
Liquid 50%, Regular and Low—Chloride Grade
Flake, Solid and Ground, 76% Na_2O

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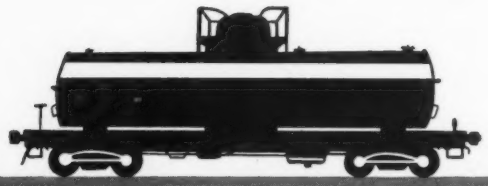

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SIPEX SIPONICS

ALCOLAC News

SIPON SIPONOLS

American Alcolac Corp. Baltimore, Md. September, 1955

NEW LOW-COST TALLOW ALCOHOL NOW AVAILABLE

American Alcolac now offers high-purity SIPONOL T, a tallow alcohol, for shipment from Baltimore, Maryland plant.

Another fine fatty alcohol is now being offered to manufacturers of household cleaners. Labeled SIPONOL T, the new alcohol has the following chemical composition: 67% C18 (stearyl), 27% C16 (cetyl) and 6% C 12-14. Highly saturated, it assures good color and perfume stability. Practically odorless, SIPONOL T will not cover or mask perfumes. Used in small amounts, SIPONOL T will effectively control the sudsing of high-foaming detergents.

PHYSICAL PROPERTIES: SIPONOL T is a white waxy solid with a melting point of 46 to 47 degrees C. Its maximum color (by Gardner scale), ester, acid number and iodine value are all less than one.

APPLICATIONS: Low cost SIPONOL T is recommended as an emollient in cosmetics, a super fatting agent in bar detergents, a finishing and softening agent in textiles, a foam depressant, an intermediate in the manufacture of detergents, and as a polymerization modifier in rubber and plastics.

ALCOLAC OFFERS TWO NEW LAURYL ALCOHOLS

Now available to chemical manufacturers requiring lauryl alcohols of superior quality and complete uniformity, SIPONOL L2 and SIPONOL L5 are manufactured under the most exacting conditions, to tightly controlled specifications. SIPONOL L2 is an extremely narrow cut, with a 70 per-cent C-12 fraction. Both of these high-purity alcohols are of the quality used by American Alcolac in the manufacture of the fine SIPON line of Lauryl alcohol sulfates. They are now being offered to firms preferring to do their own sulfating.

ADVANTAGES OF THE NEW LAURYLS: Water-white in appearance and extremely mild in odor, SIPONOL L2 and SIPONOL L5 assure manufacturers of better color, lower odor and higher uniformity in their finished products.

APPLICATIONS: SIPONOL L2 and SIPONOL L5 are recommended for use as intermediates in the preparation of synthetic detergents, lube oil additives, textile softeners and rubber and polymerization modifiers, as well as emulsifiers in the manufacture of cosmetics.

PRODUCTION CAPACITY INCREASED AT ALCOLAC

Work now in progress will increase American Alcolac's capacity for the production of fatty alcohol sulfates. Additional equipment is also being installed to supplement the company's new diversification program. Among the additions are new ethoxylating equipment, and facilities for large scale production of high-purity SIPON WD Crystals.

E. G. JACOBI JOINS ALCOLAC

Edwin G. Jacobi has been appointed general sales manager of American Alcolac Corp. In chemical sales management for the past 12 years, he will now make his headquarters in the New York Office, Empire State Building, and will be in charge of the other sales offices of American Alcolac in Chicago, Baltimore and Montreal.

Mail coupon below for further information on alcohols described here.

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AMERICAN ALCOLAC CORP., 3440 Fairfield Rd., Baltimore 26, Md.

Please send me further information and data sheets on the alcohol(s) checked below:

SIPONOL T ☐ SIPONOL L2 ☐ SIPONOL L5 ☐

I am interested in obtaining available data regarding the use of SIPONOLS for the following application . . . . . .

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Monsanto Offers World's Broadest Phosphates Line

So close to the Mississippi that some raw materials arrive by river barge, Monsanto's Carondelet, Missouri, plant makes phosphates for many nationally famous brand names. Leading its output are STP and TSPP for detergents, dicalcium and tricalcium phosphates for dentifrices, other calcium phosphates, leavening agents, and pharmaceuticals. Nowhere except at Monsanto's Trenton, Mich., plant can you select from such a wide range of phosphate compounds. What's more, you can enjoy the economy and convenience of fast "mixed car" shipment by rail or truck—enabling you to control inventories and operate with greater flexibility. Check now with the local Monsanto representative, or write: MONSANTO CHEMICAL COMPANY, Inorganic Chemicals Division, 710 North Twelfth Boulevard, St. Louis 1, Missouri.

PURE GUM RUBBER BALLS jostle phos-phate through this 200-mesh silk screen. With this and other type sifters Monsanto sizes its products to meet your most exacting requirements.

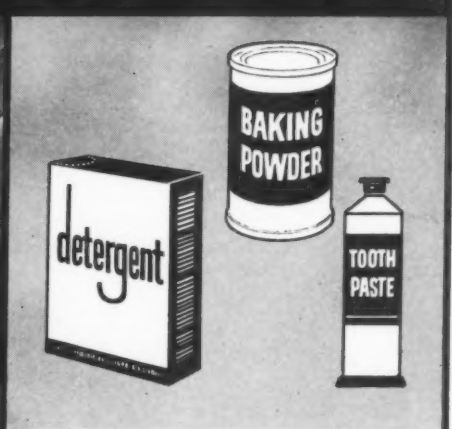
STAINLES
plies phos
soda ash,
scheduled
stocks for

THREE-SHIFT OPERATION

Smooth, 24-hour flow of product through modern equipment keeps costs in close control—to give you dependable supplies, steady prices. Monsanto STP finds its way into the majority of the country's best-known brand-name detergents—because its QUALITY is tops . . . kept that way with the strictest analytical control of every process step.

HOURLY HEAT READING of calciner sample. Monsanto regularly checks each process step not once but many times to insure uniformity, high quality. STP, alone, gets 11 different lab tests, which helps you maintain end product standards.

STAINLESS STEEL TANK TRUCK supplies phosphoric acid. Deliveries of acid, soda ash, lime, other raw materials are scheduled to insure unfailing phosphate stocks for Monsanto customers.



HOUSEHOLD WORDS . . . baking powder, toothpaste, tooth powder, detergent. In most, the effective ingredient is a phosphate "builder"—very often a Monsanto product made at Carondelet.

JUST PUBLISHED!

An easy-reading booklet giving a brief yet complete review of technical and commercial aspects of sodium phosphates. For your copy ask a Monsanto representative, or write: MONSANTO CHEMICAL COMPANY, Inorganic Chemicals Division, 710 N. Twelfth Blvd., St. Louis 1, Mo.

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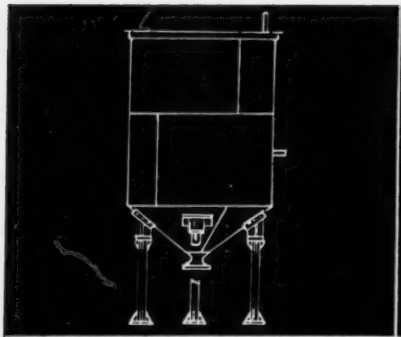
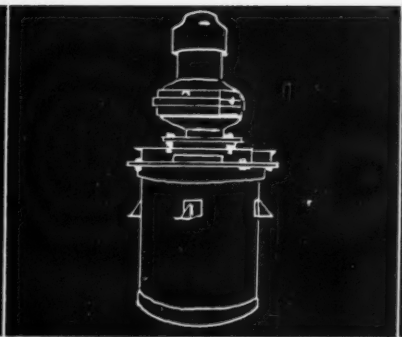
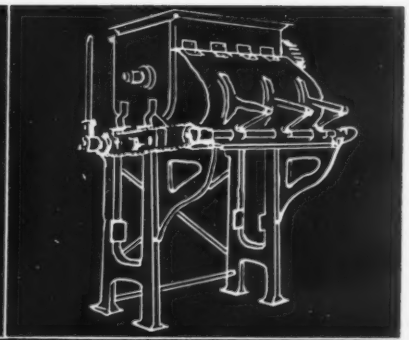
WORLD'S LARGEST PRODUCER OF ELEMENTAL PHOSPHORUS



KETTLES



CRUTCHERS



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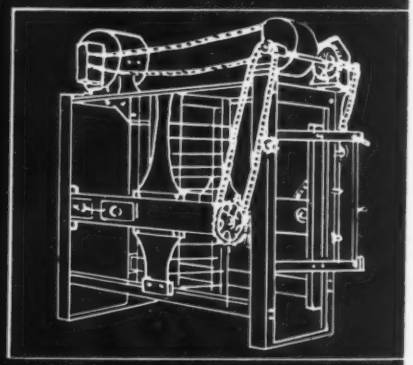
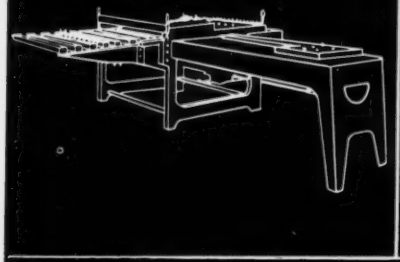
114 years ago Houchin started producing soap making machines.

Practically all basic soap making machinery today is derived from original Houchin inventions.

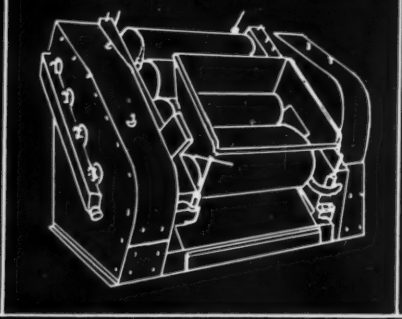
Look to Houchin for further revolutionary improvements.



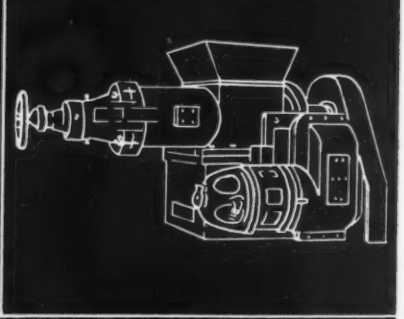
SLABBERS



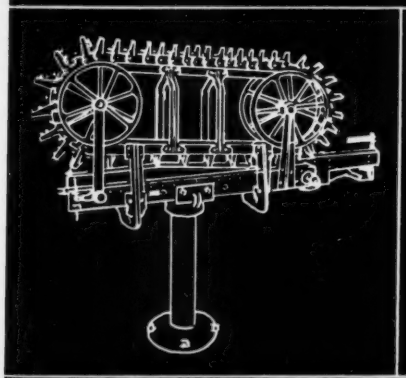
LAUNDRY SOAP CUTTERS



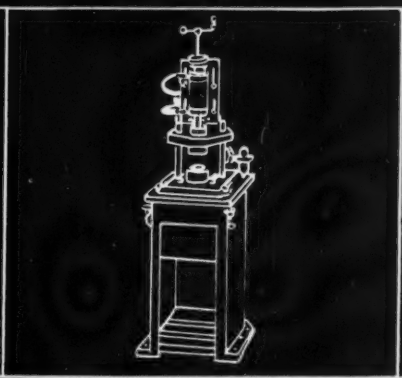
MILLS WITH GRANITE OR CHILLED IRON ROLLS



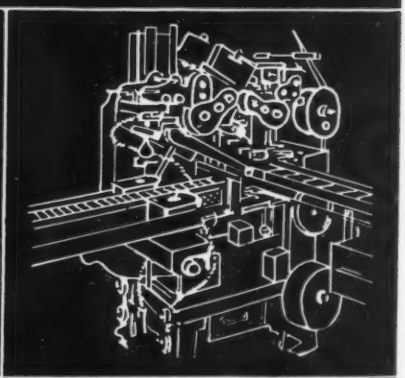
PLODDERS



CONTINUOUS SCRAPLESS ADJUSTABLE TOILET SOAP CUTTERS



PRESSES—FOOT OR AIR OPERATED



WRAPPERS FOR ALL SIZES OF SOAP

HOUCHIN MACHINERY CO., INC. HAWTHORNE, NEW JERSEY, U.S.A.

Colloid Mill Mixing

COLLOID mills are used by chemical specialties manufacturers for producing emulsions and dispersions in making such products as floor waxes, furniture polishes, shoe polishes, automotive polishes, metal polishes, shampoos, stock insecticide sprays, hand and other lotions, shaving products, toothpastes, hand cleaners, creams, disinfectants, concrete and garage floor cleaners, metal cleaners, adhesives, water proofing compounds and numerous other chemical specialties.

We will assume that colloid mills do not always form dispersions or emulsions of true colloid proportions, but do accomplish the basic purpose of dispersing one substance uniformly throughout a dissimilar substance. Therefore, for the purpose of this article, we shall call a colloidal system simply the uniform dispersion of one substance throughout a dissimilar substance. To divide this system further, the term emulsion shall be used to describe one liquid uniformly dispersed throughout a dissimilar liquid and a dispersion shall be defined as a solid uniformly dispersed throughout a liquid in which it is not normally soluble. These two types of systems are the most important to chemical specialties manufacturers.

The basic difference between ordinary mixing equipment and the average colloid mill lies in the intimacy and extent of the mixing or in the particle size and degree of dispersion. For the chemical specialty manufacturer, where the product requires it, the colloid mill gives a more completely and intimately mixed product. In some products, intimate mixing or extensive dispersion is essential. In others, it is not. But in any instance where a fine dispersion or emulsion is needed, the colloid mill usually can produce a superior product. It also has the advantage that the process is practically continuous as opposed to batch mixing.

A colloid mill generally consists of a rotor and stator. The rotor revolves at speeds up to many thousand revolutions per minute inside a cone-shaped stator, which remains stationary. There is usually an adjustable gap between the rotor and stator, through which the product is forced. Here it is subjected to a high degree of shear and attrition. The solid phase is reduced to minute particle size and suspended and stabilized in a colloidal suspension. Dispersion is dependent on two factors—clearance and speed. The smaller the clearance between the rotor and stator and the higher the speed of the rotor, the greater the disruptive force and consequent dispersion.

It can be assumed that in any particle of matter the elements composing the internal molecular structure are completely balanced and held firmly in position. However, the nuclear charges at the surface of the particle are unbalanced, which accounts in part for the surface active characteristics of a particle. This outer layer of charged particles is receptive to an opposite charge. Thus, it is necessary for the particle to be wetted by a liquid. If this were not the case, adsorption of a liquid by a solid would not be possible.

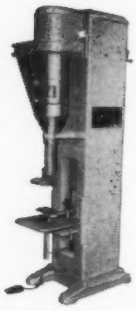
Wetting occurs when a solid phase and a liquid phase come into contact in any manner so as to form a solid-liquid interface. Thus, the solid must be completely coated with the liquid in order to be completely wetted. When the solid particle is completely encased in a film of liquid, the opposite charges of the two substances orient in an orderly manner and form what is, for all practical purposes, a neutralized particle.

When the solid substance is passed through the opening in a colloid mill, it is subjected to mechanical shear and attrition and is smeared by the liquid. The smaller the particle, the easier it is to be wetted. When the particle is broken down to the micron range by the effect of the colloid mill, it can be easily wetted, and a film of liquid completely encases each and every particle passing through the mill.

The surface energy of the particle holds the liquid to it. Thus, with the outer charge satisfied by the liquid coating, the individual particles are no longer attracted to each other and cannot regroup within the colloidal system. This peptizing or stabilizing action of a solution on a solid material is due to

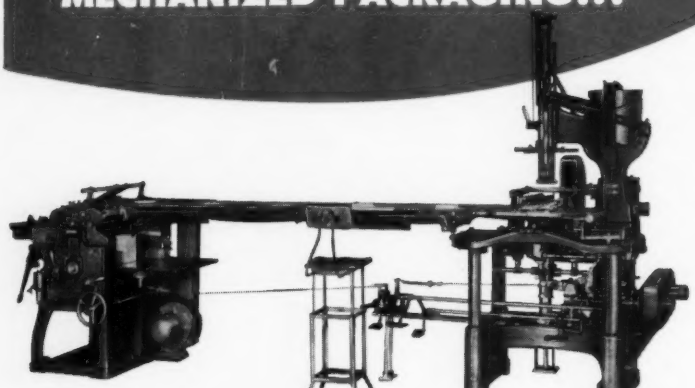
THIS is the fourth of a series of articles discussing types of machinery and equipment used in the manufacture, processing and packaging of soaps, detergents, and such chemical specialties as floor waxes, disinfectants, household and industrial insecticides, spot removers, deodorants, floor cleaners, polishes, laundry bleaches, moth specialties, rodenticides, shave products, sweeping compounds, tooth pastes and powders, glass cleaners, dish washing compounds, etc. The main purpose of this series is to present the latest types of machines and equipment available to the soap, detergent and chemical specialties manufacturer in his daily plant operations.

Improved Dexterity in MECHANIZED PACKAGING...



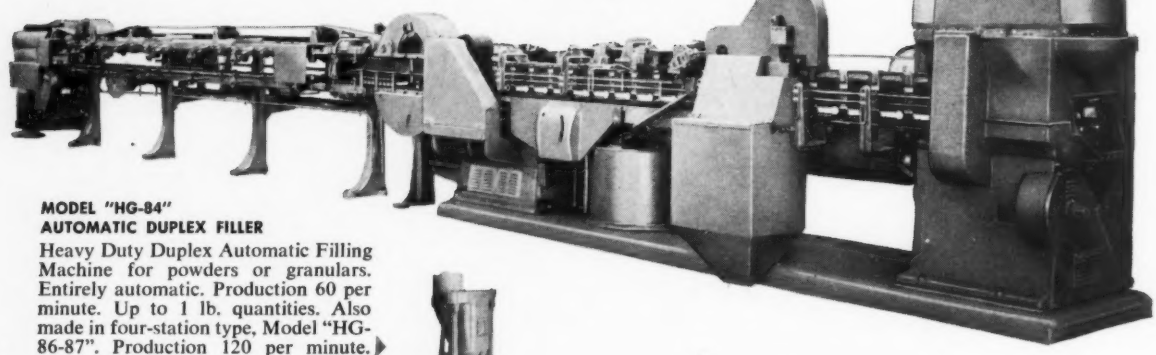
MODEL "EG" UNIVERSAL FILLER

Newest design. Fully streamlined. Fills by gross weight or by packing or by measurement. Handles powders, granulars or pastes. Various types of containers. ¼ oz. up to 5 lbs. or more. Production 15 to 30 per minute.



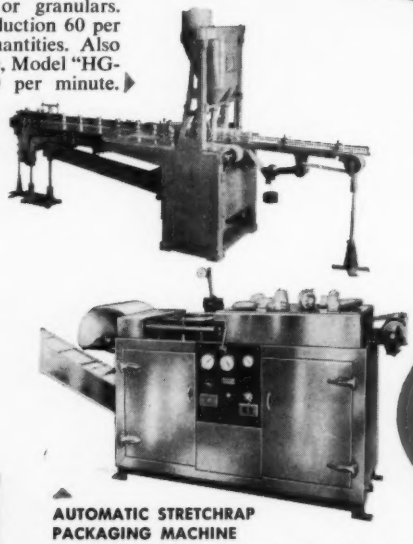
STOKESFEED PAPER BOX MACHINE

A complete paper box gluing, feeding and wrapping unit. Made in two sizes—Model "B" and Model "H". Completes up to 40 boxes per minute. Only one operator required. MODEL "B"—maximum: 20" x 15" x 4"; minimum: 6" x 4" x ½". Model "H"—maximum: 15" x 10" x 2¾"; minimum: 4" x 1¾" x ½".



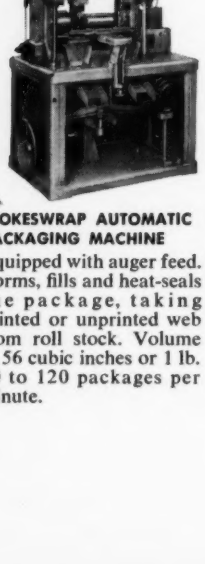
MODEL "HG-84" AUTOMATIC DUPLEX FILLER

Heavy Duty Duplex Automatic Filling Machine for powders or granulars. Entirely automatic. Production 60 per minute. Up to 1 lb. quantities. Also made in four-station type, Model "HG-86-87". Production 120 per minute.



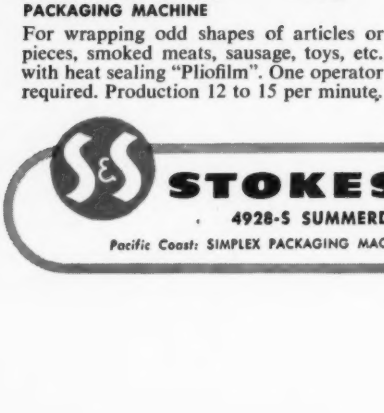
HIGH-SPEED NEVERSTOP CARTON FILLING & SEALING MACHINE

For free-flowing products. Feeds, fills and seals cartons, both top and bottom, in one continuous operation. Cartons 5 15/16" x 3 1/16" x 1 3/16" to 8½" x 6" x 2⅛". 60 to 200 or more per minute. One operator.



STOKESWRAP AUTOMATIC PACKAGING MACHINE

Equipped with auger feed. Forms, fills and heat-seals the package, taking printed or unprinted web from roll stock. Volume to 56 cubic inches or 1 lb. 50 to 120 packages per minute.



AUTOMATIC STRETCHRAP PACKAGING MACHINE

For wrapping odd shapes of articles or pieces, smoked meats, sausage, toys, etc. with heat sealing "Pliofilm". One operator required. Production 12 to 15 per minute.

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the adsorption of the liquid by the solid and results in the formation of a stable dispersion that will not usually settle out on standing.

In an emulsion, droplets of one liquid are dispersed in the bulk of a second liquid. Since the free surface of a liquid acts as a kind of elastic to keep the mass at a minimum, a ball-like shape is formed. When a droplet is dispersed, this ball-like shape forms with the charged particles orienting themselves in such a manner that a uniform outer charge is formed. This outer charge, or surface tension in liquids, forms a film-like structure, the separating boundry then possessing a definite packed structure of molecules.

However, in a liquid, this electric potential is insufficient to maintain stability unless the emulsion is highly diluted and dispersed. In more concentrated emulsions, the droplets touch each other and run together unless an emulsifing agent is added. This emulsifing agent must surround each droplet with a film to prevent their running together.

With any pair of non-miscible liquids, two emulsions can be formed. For example, water can be suspended in oil, or oil can be suspended in water. The type of emulsion is important to the manufacturer, for a stable emulsion one way may be completely unsatisfactory the other way. An emulsion of creosote in water is much less satisfactory than an emulsion of water in creosote for treating wood.

The emulsifing agent must be selected with care, for it can cause the emulsion to go one way or the other. When very little emulsifier is used, it is best to add the oil and emulsifier to the water in a pre-mix and then run through the colloid mill. The temperature of the two phases should be approximately the same at the time of emulsification. If waxes are part of the oil phase, the temperature should be at least 10°F higher than the melting point of the wax.

Air must not be trapped in the emulsion. If air is trapped, stability may be greatly reduced because the emulsifier tends to migrate to the liquid-air interface instead of remaining at the oil-water interface.

Abbe's 110 gallon "Dispersall" paste-type mixer. Of stainless steel construction, it is used by large eastern manufacturer of tooth paste.

Following are illustrations and descriptions of equipment manufactured by leading suppliers of colloid mills. Only a single machine of each manufacturer could be illustrated because of space limitations. However, most of these companies manufacture colloid mills in a complete range of sizes.

Abbe Engineering Co., 50 Church St., New York 7, N. Y., manufactures "Dispersall" mixers, pebble and ball mills, dry blenders, sifters, jar rolling machines, impact pulverizers and other equipment.

The "Dispersall" mill is a bottom entering unit of the rotor and stator type. The rotor and stator are available in two different styles: the rotor may be vaned, in which case the stator is smooth, or both the rotor and stator may be cupped. The milling unit is located at the bottom of the kettle and directly above it may be two different circulating elements.

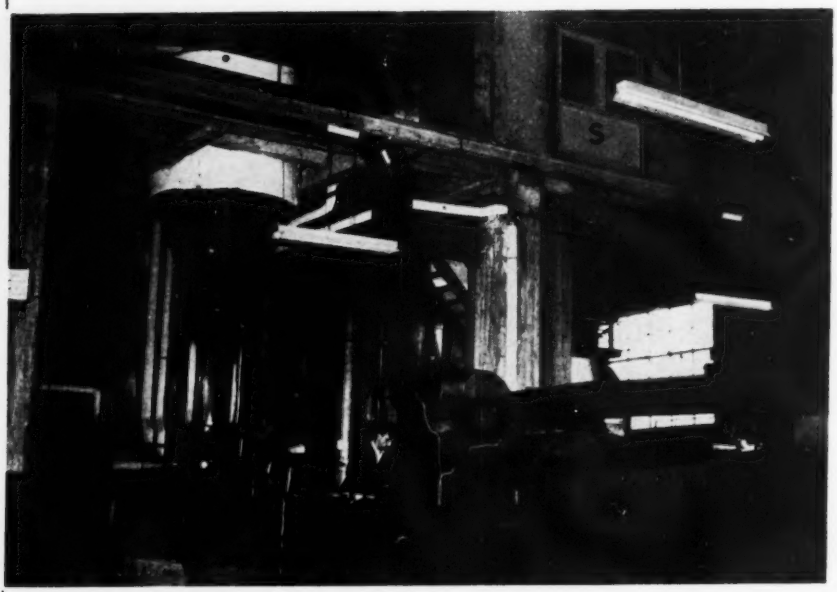
In the regular "Dispersall" mill for fluid and slurry mixes, a tubular circulating element is used. This unit is attached to the outside of the stator, so that all the liquid is drawn down the tubular circulating element and forced through the milling head as a result of a vortex formed by the mill itself. The material rises from the outer edge of the rotor in a spiralling motion and is either guided back into the vortex stream by baffles and slits in the circulating element, or it rises to the top of the element and is drawn down into the vortex from here.

The second type of circulating element, that for paste mixing, consists of two pairs of heavy paddles, which revolve clockwise. They are mounted on a revolving head, which also revolves in a clockwise direction, but slower than the paddles. The revolving head also carries two scraper arms, which scrape the inner wall of the kettle to make certain that all material is thoroughly mixed by the cupped rotor and stator, the unit used for paste mixing.

The Abbe units are available in change can models, or may be equipped with a sealed jacketed kettle for vacuum or pressure operation. Mechanical hoists are available on all paste type models to lift the paddle element from the container.

Sizes range from laboratory units

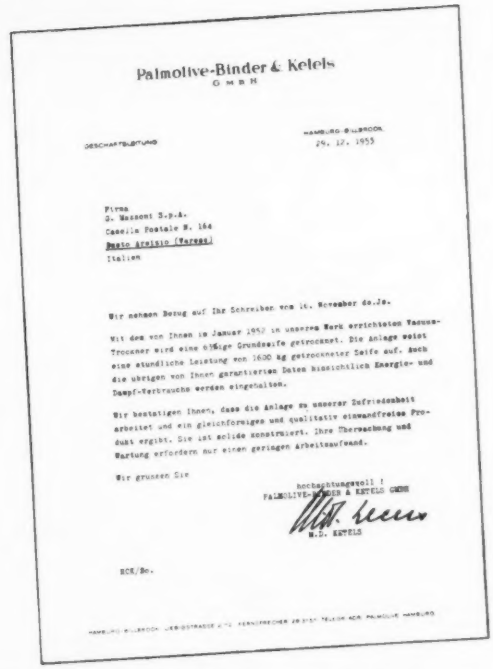
Continuous Soap Plants



Photograph of a MAZZONI soap plant automatically producing one ton of household or toilet soap per hour. "S" is the silo for the storage of the dried soap rods. From the silo the rods are then passed through a line of finishing machinery for milled toilet soap cakes.

Advantages of the MAZZONI Process:

- ★ Small plant space; only one operator needed.
- ★ Saves 70% in steam, 50% labor, 40% electric power.
- ★ Operates at low temperature, avoiding deterioration of soap.
- ★ Vacuum process gives better toilet soaps. Deodorizing effect reduces perfume needs. Smoother, grit-free cakes which wash off evenly. Improved lathering.
- ★ Transparent toilet and laundry soaps without addition of glycerine, alcohol, sugar, and any other additives.
- ★ Complete installations (mixers, mills, plodders, cutters and stampers) for milled toilet soap and soap flakes.
- ★ Since 1945 more than 115 plants have been installed in different countries of the world.
- ★ Laundry soaps, pure from 62% fatty acids upwards or filled from 35 to 62% fatty acids, ready for pressing and immediate packing without slabbing, cutting, etc. Automatic perfuming device included.
- ★ Suitable for adaptation in any soap factory, — a compact, low-cost vacuum process, continuous from neat soap to pressing and wrapping.
- ★ Soaps showing a beta phase content from a minimum of 75 percent to a maximum of 100 percent. Analyzed in the laboratories of Procter & Gamble Company, Cincinnati. Analysis is given with their permission.
- ★ Plants for outputs of half-ton, one ton, two tons, three tons or higher per hour.



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Mit den von Ihnen im Januar 1952 in unserem Werk errichteten Vacuum-Trockner wird eine 67%ige Grundseife getrocknet. Die Anlage weist eine stündliche Leistung von 1600 kg getrockneter Seife auf. Auch die übrigen von Ihnen garantierten Daten hinsichtlich Energie- und Dampf-Verbrauche werden eingehalten.

Wir bestätigen Ihnen, dass die Anlage zu unserer Zufriedenheit arbeitet und ein gleichförmiges und qualitativ einwandfreies Produkt ergibt. Sie ist solide konstruiert. Ihre Überwachung und Wartung erfordern nur einen geringen Arbeitsaufwand.

Wir grüssen Sie

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PALMOLIVE-BINDER & KETELS GMBH
M.D. KETELS

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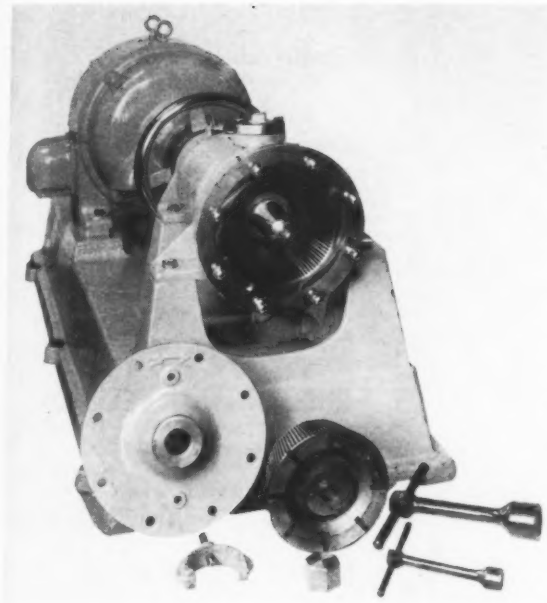
For further detailed information, write to

G. MAZZONI, S. p. A.

Busto Arsizio, (Varese) Italy

Cable address: Cosmazzoni, Busto Arsizio



Disassembled Model 50 "Charlotte" colloid mill of Chemicolloid Laboratories, Inc., Garden City Park, N. Y. View shows grooved rotor (removed from unit) and stator. Various types of groovings are available to meet different conditions of use. Unit shown is 50 h.p., rated at 3600 r.p.m. Model 50 has a capacity of from 100 to 4,000 gallons per hour.

of one gallon capacity with a one h.p. drive to 660 gallons or larger, with drives up to and over 100 h.p. Illustrated is a 110 gallon stainless steel unit used in a large toothpaste manufacturing plant.

Chemicolloid Laboratories, Inc., 55 Herricks Rd., Garden City Park, N. Y., manufactures the "Charlotte" line of colloid mills. These mills operate on the rotor and stator principle, with both the rotor and stator being grooved. The grooved stator and rotor do not operate on the hydraulic shear alone, but also from turbulence and impact action brought about by the eddy currents of the grooving.

"Charlotte" mills are available in a number of different models, from the laboratory unit, which is a one h.p. unit, 3600 r.p.m. with a capacity of up to 35 gallons per hour, to the model 75, which is equipped with a 75 h.p. electric motor, 3600 r.p.m., and a capacity of from 1000 to 5000 gallons per hour. Several other models are available in various h.p. and capacities. Illustrated is Model 50, a 50 h.p., 3600 r.p.m., with a capacity from 100 to 4000 gallons per hour.

Various rotor and stator groovings are available for special conditions. The distance between the rotor and stator can be adjusted by means of a calibrating device.

Kinetic Dispersion Corp., 95 Botsford Place, Buffalo 16, N. Y., manufactures the "Kady" mill for colloid dispersions. This mill is a bottom-entering unit which is an integral part of the kettle in which it operates. Basically it is a rotor and stator type dispersion unit which works on the principle of impact and attrition rather than mechanical shear. As the rotor revolves at a high rate of speed, the material is drawn into the center, and moves outward through the slots in the rapidly traveling rotor. Like all matter in motion the agglomerate mass traveling at high speed in the rotor has kinetic energy stored in it while rotating at high speed. By opening a slot in the closed circle of travel, the mass changes its course outward. When the material travels through the slots in the rotor, it reaches the outer edge and, when the slot in the rotor lines up with a slot in the stator, the mass is thrown outward into the stator slot. It can only travel the width of the slot, but during this travel the mass has free kinetic energy equal to one-half its weight times square of its velocity. This kinetic energy is converted to work at the moment the mass is stopped by the slot tip in the stator, which is at right angles to the path of travel.

The "Kady" mill consists essentially of three parts, the dispersion unit itself, consisting of a heavy slotted rotor and stator, which is permanently mounted in the bottom of a tank. The tank is of two-shell construction, and water jacketed throughout. It is not designed for pressure. Both the tank and cover are made of stainless steel and the cover is jacketed to prevent solvent evaporation. The third unit is the main motor and mill base, which is located under the tank. The mill is driven by V-belt drive. The "Kady" mill is available in several different models and sizes.

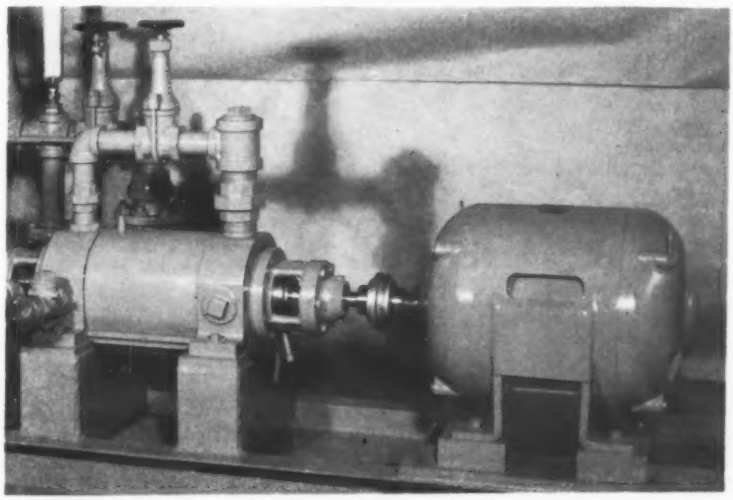
Lancaster Chemical Corp., Broad & 13th St., Carlstadt, N. J., manufactures two models of the Lancaster "Disperser." A smaller laboratory size will be introduced shortly.

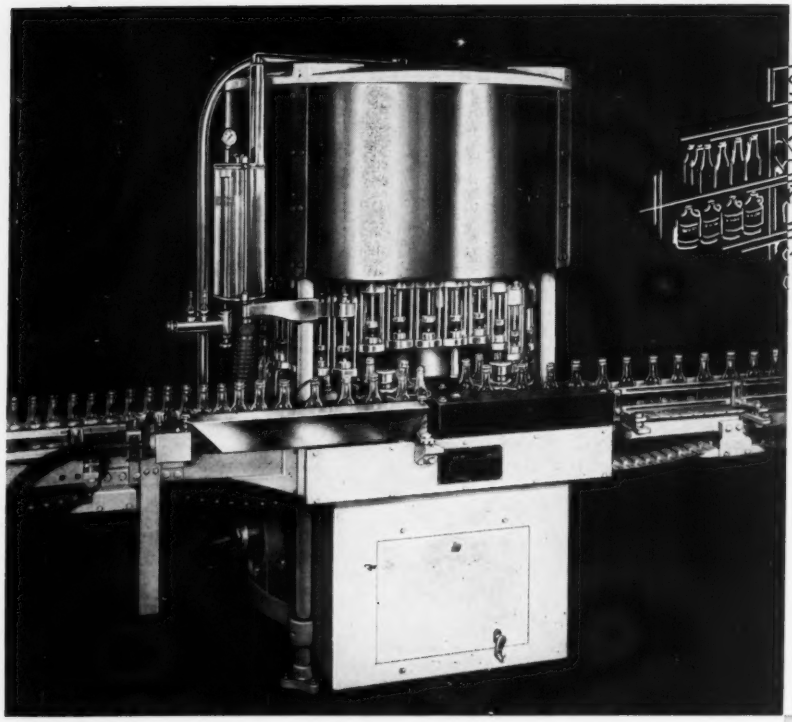
The two models now available are the D-4 and the D-6. Model D-4 has a capacity of 3,500-5,000 gallons per hour with a 20-30 hp motor. Model D-6 has a capacity of 3,500-5,000 gallons per hour with a 50-75 hp motor. The size of the motors depends on the type of dispersions to be handled. Rotor speed on both models is 3,600 rpm. The new laboratory model, when released, will have a capacity of 50 gallons per hour with a rotor speed of 6,000.

The machine consists of an electric motor which is coupled to the disperser by a direct flexible coupling. The disperser itself consists of a horizontal, tubular housing, through which the rotor extends from one end to the other. Spaced along the rotor shaft are six gear-cut impellers. Between these impellers are located stator plugs. These plugs interfere with the high velocity rotation of the material being processed. This develops areas of extreme turbulence.

The material is fed onto the face of an impeller and forced through the machine. Its travels are broken at intervals along its helical path by sta-

The "Disperser" of Lancaster Chemical Corp., Carlstadt, N. J., comes in two models. Model D-4 has a capacity of 3,500-5,000 gallons per hour with a 20-30 h.p. motor. Model D-6 has the same capacity, but comes with a 50-75 h.p. motor.





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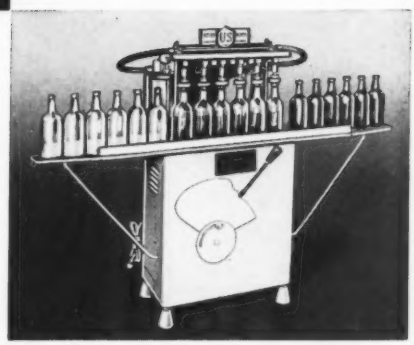
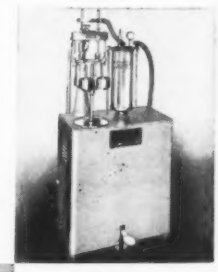
For filling liquids to meet large-volume, low mark-up merchandising requirements, U.S. Rotary Vacuum Fillers are meriting first choice by the packagers of national brands. From the click of the starter to the end of each long run, the dependable efficiency of these machines is easing the cares of production executives the world over.

If your production schedules have outgrown your equipment, it will pay you to learn what two generations of liquid filling engineering experience can contribute to your operation. Learn, too, how U.S. automatic liquid filling equipment can be custom-engineered to your specific production requirements . . . at a substantial end saving over a standard machine.

For recommendations or quotations, please specify product, size and type of container and production in terms of fill per minute, hour or day. For details of the machine, write for the Rotary Filler Bulletin.



U. S. Model B-49 Straightline Vacuum Filler; the most automatic one-man filler. Operates with or without discharge conveyor. For all types of liquids. Write for Model B-49 Bulletin.



U. S. Model B-2 Semi-automatic Vacuum Filler. Provides efficient continuous production, filling two containers at a time. For all containers up to 4⅛" dia. All liquids. Portable. Write for Model B-2 Bulletin

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tors, which act to develop linear extension, turbulence and cavitation. This operation gives continuous dispersion without the need for close operating tolerances. A heat exchanger in the circulating line may be used to control temperatures of the material being processed. Recirculation of the material is possible with simple piping from a discharge port to an inlet. The "Disperser" has three ports at the inlet impeller and three ports at the outlet. In the standard models, tube, rotor and shaft are of high carbon steel. On special order, other materials may be used for special corrosion requirements.

Manton - Gaulin Manufacturing Co., Everett 49, Mass., manufactures a line of homogenizers and colloid mills.

Illustrated is a homogenizing unit. This machine differs from a colloid mill in that it is a slow moving, high pressure, triplex pump, which brings the product to an homogenizing valve, where a pressure drop takes place. This results in a high velocity shear across the face of the valve and an impingement against the ring surrounding the valve opening. The valve itself is spring loaded to control the opening between the valve and the seat which, in turn, controls the homogenizing pressure. This orifice is stationary in the homogenizing unit. Apparently, as a result of the pressure drop as the product passes through the homogenizing valve, cavitation also occurs. The drop in pressure causes vapor bubbles to form and collapse, resulting in a high degree of cavitation.

The Gaulin colloid mills operate on a two-phase principle. As the product feeds against the rotor, it is thrown outward through the first gap of the rotor and stator by impellers located on the front rotor face. These impellers also act as cutters and shredders, breaking down and throughly disintegrating the material as it passes through them.

Standard eight inch paste mill of Premier Mill Corp., Geneva, N. Y. Mills made by this firm feature direct couple electric motors of from five to 100 h. p. and speeds of 3,600 r.p.m.

The pressure built up by the impellers forces the material across the outer face of the rotor and then inward across the second or back face of the rotor, where the product receives a second treatment. In this second passage, the material is traveling counter to the path of centrifugal force. The material cannot leave this second rotor face unless it is forced out by the material behind it. This second gap is adjustable by means of a calibrated dial.

These colloid mills are available in three sizes: two, four and eight inches. All are powered by constant speed motors at 3,600 rpm, which bring the rotor periphery speed up to 10,000 rpm through a suitable gear ratio.

The two inch mill is powered by a 1½ hp motor; the four inch mill by a five hp motor; and the eight inch mill by a 10 hp motor. Depending on the product, the capacities of the mills are as follows: two inch mill, from eight to 100 gallons per hour; four inch mill, 18 to 300 gallons per hour; and the eight inch mill, 36 to 600 gallons per hour. These capacities depend both on material and setting.

Premier Mill Corp., Geneva, N. Y., manufactures a line of colloid mills, laboratory dispersators, and production dispersators. The colloid mills are based on the rotor and stator principle. In most cases, a smooth rotor is employed. However, faces of special design are available including abrasive stones. The standard line includes mills with rotor diameters of from three to 15 inches, power levels of from three to 100 h.p., and capacities of from five to 3,000 gallons per hour.

For laboratory and development work, a belt driven colloid mill, with speeds of from 7200 to 17,000 r.p.m. for the three inch and 5400 to 12,800 r.p.m. for the four inch mill are available. Three different speeds are available within the ranges shown, and the capacity of the three inch mill is from five to 100 gallons per hour, depending on the speed of the rotor. The capacity of the four inch mill is from 10 to 180 gallons per hour, also depending on the rotor speed.

Standard production units are available with speed ranges of from 5000 to 10,000 feet per minute. Construction utilizes standard 3600 r.p.m. electric motors direct coupled to the mills. These machines are available with six, eight, 10 and 15 inch rotors. Horsepower requirements for these mills range from five to 100. Illustrated is a standard eight inch mill.

High speed production units are available with rotor diameters of six, eight and 10 inches. Power ranges from 10 to 40 h.p., and mill speeds range from 9000 to 5400 r.p.m. These mills are available in capacities of from 50 to 600 gallons per hour.

Tri-Homo Corp., Salem, Mass., manufactures a line of dispersing and homogenizing equipment. Tri-Homo machines work on the rotor and stator arrangement, where the product is forced between the two units. The rotor can be smooth, serrated, or vitrified (stone or porcelain) for actual grinding. All models are equipped with a water jacketed stator to prevent the product from over-heating. Both the stator and rotor are available in various products such as stellite, stainless steel, monel, stone or porcelain, depending on the product consistency.

The machine is available in several models. The junior laboratory model, 1½, weighs 50 pounds, has two speeds, 5,000 and 10,000 rpm, is equipped with a ½ hp electric motor. Model 12, which weighs approximately 1200 pounds, can be had with motors up to

Homogenizer of Manton-Gaulin Manufacturing Co., Everett, Mass. Unit differs from colloid mill in that it is a slow moving, high pressure, triplex pump, which brings product to a homogenizing valve where a drop in pressure takes place. This results in an high velocity shear across the face of the valve and at impingement against the ring surrounding valve opening.

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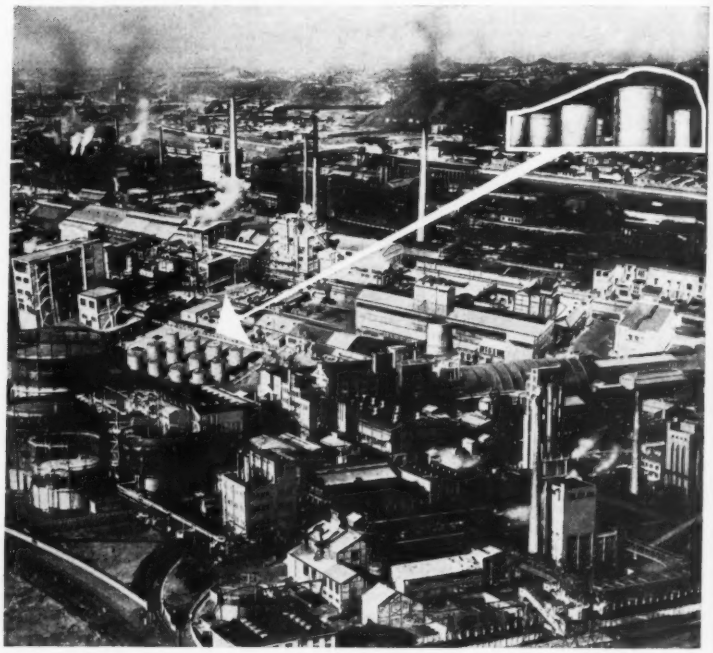

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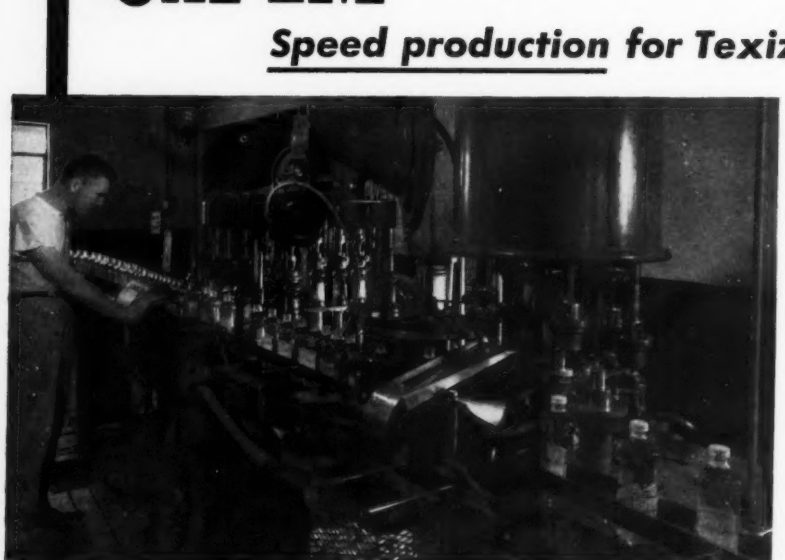
CaPeM SCREW CAPPERS

Speed production for Texize Chemicals, Inc.



This Model D-6-F Rotary CaPeM increased production to such an extent that Texize Chemicals, Inc., Greenville, S. C. recently ordered a duplicate. This completely automatic line is operated continuously at production rates in excess of 200 bottles per minute.

CaPeM Screw Cappers apply all types of metal and plastic screw caps to jars, bottles, cans and jugs ranging in size from 1 oz. to gallons. Speeds range from 40 to 300 containers per minute. Write for complete information.

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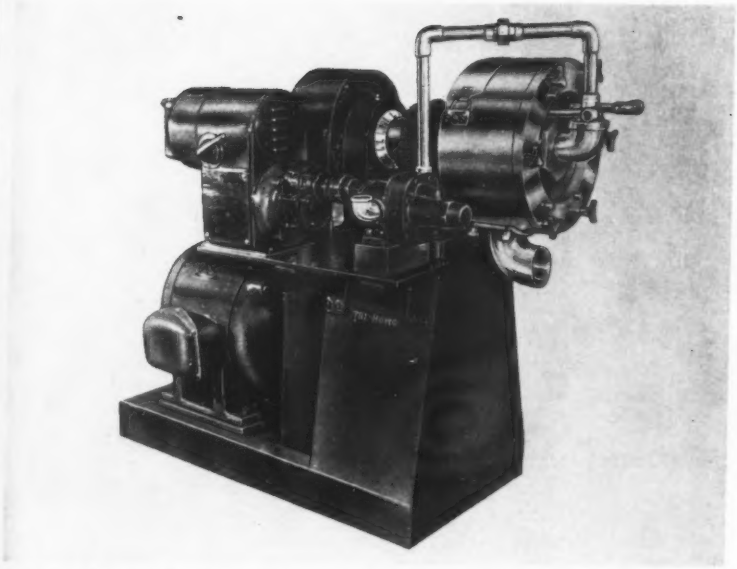

Tri-Homo Corp., Salem, Mass., dispersing and homogenizing units are equipped with a worm impeller feeder to force the product through the mill head.

Cutaway view of colloid mill made by Troy Engine and Machine Co., Troy, Pa. Of rotor and stator type, Troy's mills come in five different models.

50 hp, and has a capacity of from 150 to 200 gallons per hour with oil paints and 250 to 500 gallons when mixing pigment-water dispersions.

The machines are equipped with a worm impeller feeder to force the product through the mill head. A micrometer adjustment is available to fix the distance between the rotor and stator. Welded steel frames are available with either low type discharge (24 inches from the floor) or higher discharge (36 inches from floor) for barrel feeding.

Models are also available with variable speed pump units. A gear shift model with variable speed pump feeding has four selective speeds for mixing various products. The "Varidrive" models allow for any rotor speed between the rpm range, which varies from 2,500 to 15,000 on model 2V to 2,500 to 18,000 on the heavy duty 3V model. Production on the smaller unit is from two to 10 gallons per hour. On the larger unit, it ranges from three to 30 gallons per hour.

Troy Engine and Machine Co., Troy, Penna., manufactures a line of colloid mills, angular mixers, roller mills, and power equipment such as generators, steam engines, etc.

Troy's colloid mill is of the rotor and stator type. Approximately five different models are available, from the laboratory size, which is a three hp unit, with an approximate speed of 20,000 rpm and a capacity of five to 20 gallons per hour, to the large model 4, which has an approximate rotor speed of 5,650 to 16,950 rpm.

The unit is equipped with three independent heating or cooling jackets, an adjusting ring for setting the distance between the rotor and stator while in operation. Rotors and stators are available in a number of designs, smooth surfaced, with interlocking rings, slotted rings, etc. All units are available in stainless steel construction.

★

New McKenna Reps.

McKenna Laboratories, Los Angeles, manufacturer of ultrasonic cleaning equipment, announced recently the appointment of two eastern laboratory supply houses to distribute its line in the laboratory field. The new sales representatives are Harshaw Scientific, Cleveland, and Atlantex Corp., Boston. Turco Products, Inc., Los Angeles, continues to serve as McKenna's national sales representative for industrial use.

Model 4BH, 60 horsepower "Kady" mill made by Kinetic Dispersion Corp., Buffalo, N. Y. Batch dispersion capacity of mill is 175 gallons.

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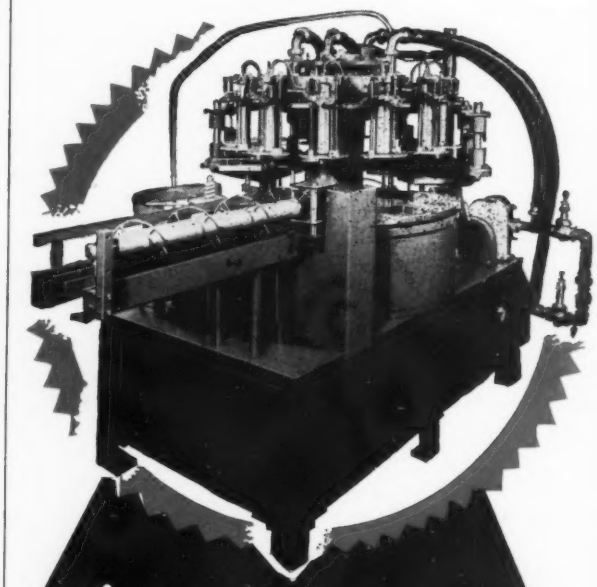

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PRODUCTION Clinic

By E. G. Thomssen, Ph.D.

AUTOMATION has become of increasing importance to the production end of industry within a comparatively short time. When this term first appeared in literature, it was not uncommon to find editors changing "automation" to "automatic" because it was a new word to them. This newly coined word, now in general use, denotes a new technology in manufacturing and office detail. Remarkable, usually electronic, machines replace men and women in performing many types of work, and do it more accurately and more rapidly. Fewer employees are required and costs are reduced very materially. As a result the trend toward antomation is increasing rapidly for many factory operations.

The auto industry is often cited as being the most advanced industry in automation. Feature writers point out how machine tools in automobile manufacture have been devised to run by themselves, inspect their finished products and correct mistakes. A recent electronic brain, we are told, is stealing the jobs of men. Labor unions watch the trend to automation carefully.

We question the assertion that automation is very new. Instruments which perform the duties once carried out by workmen have been used in chemical processing operations for a long time. The term automation had not been coined at that time but the manner in which machine and instrument operations performed tasks once carried out by manpower, certainly has been just about as spectacular in this field as automation is in mechanical operations today.

A point in question here to which it is difficult to give a definite answer is concerned with where automatic operations leave off and automation begins. Most of the operations depending upon automation use some electronic device but mechanical equipment must also be employed. As we said above, the electronic devices are referred to as the "electronic brain." Without them automation would not be feasible. It is extended as more electronic devices are conceived. They activate the mechanical machinery that performs all sorts of work from machining large engine blocks to assembling radio and TV sets or issuing checks. In addition to electronic contraptions mechanical devices like punched tapes record the movements previously made by workers and are quite necessary to automation. Activation of machinery by perforated tape is by no means recent.

Since we have asserted that automation is not entirely new to chemical processing, it is of interest to call attention to self-activating operations that are not recent developments.

I remember quite vividly a visit over a decade ago to a plant that was making a product in large volume that required paste batch mixing, milling, chilling, dilution and centrifuging. The production manager's desk faced a panel board on which there was an arrangement of push buttons, electric switches and lights. Before it sat two persons who watched various instruments and an electric eye. From time to time they pushed a switch or button. That was all there was to it. The whole process in the plant several hundred feet away went along smoothly and expertly without any human labor. Several pieces of each type of equipment were controlled. In modern parlance this type of processing would be termed automation. The production manager then called it automatic control.

Dr. Thomssen

Controls such as those just mentioned are by no means new to the chemist. He has not only used electronic process controls for a period of years but such factors as conductivity, water softening, liquid flow and level, humidity, pressure pH, concentration, temperature and others have been controlled without the human factor. Many different types of chemical machinery also have operated for years without using the human element to activate them. If it were not for those innovations the chemical industry could not have grown as spectacularly as has been the case in recent years. Even though the percentage of labor cost to raw material cost is decidedly lower than in machine or auto manufacture, chemical production men have devised labor saving devices equally as important to them as this new concept of production by automation is to other industries.

Plants producing such chemicals as synthetic fibres, food, soaps, plastics, glass, detergents and petroleum products have long supervised operations by instruments placed strategically in hundreds of locations. Automation, then, is not new to the chemical industry.

In cases where chemical specialties are being packaged into small units there is future opportunity for automation. Some industries have blazed the way in this direction. In certain bakeries, crackers are baked and packaged at a higher rate now than ever before and by five percent of the labor

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Versene, when added to any cleansing formulation (regardless of water hardness), prevents the formation of the film-forming insolubles that invariably cause dulling. Through the proper addition of Versene to your formula you can achieve improved performance for your product and at the same time give it a definite sales advantage over competition.

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Braun-Knecht-Heimann Co., San Francisco, Calif., Salt Lake City, Utah
Braun Corporation, Los Angeles, California
Van Waters & Rogers, Inc., Seattle, Wash., & Portland, Ore.
European Manufacturing Agent:
Rexolinfabriken Aktiebolag, Helsingborg, Sweden

formerly employed. Radios are being assembled and packed at the rate of 1000 per day by two workmen instead of the 200 once used. There are numerous cases in which automation is employed in filling, closing and sealing powdered and liquid products to reduce the amount of labor required. With the large increase in production of aerosol products new methods of loading are bound to be developed.

The thought that naturally comes to mind is: what will be the effect on the labor market if new improved machines replace manpower? One example of this is of interest. It is predicted that one man may soon control an oil refinery that presently employs several hundred persons. It is very probable that temporary unemployment will result. Economists agree, however, that past experiences have proved that as production methods are improved more men have been employed. Many of them had to acquire new skills and much of the slack is taken up by the building and servicing of the new machines. One college professor in economics has asserted that "if automation is properly understood, applied, developed and controlled, it may provide, together with atomic energy, the means to eliminate poverty for the first time in the history of the world."

Automation is here to stay and will grow rapidly. The experts in this field are mostly younger men who will solve many of the problems now facing further application of the principles of automation.

Moisture Control

TWO concerns which specialize in accurate moisture control are Skuttle Mfg. Co., Milford, Mich., and Niagara Blower Co., New York 17, N. Y. Skuttle offers its services as consultants in controlling humidity and condensation. The firm claims to be in a good position to solve problems relating to humidity and moisture quickly and economically. A brochure describing their services is available upon request.

Dry air with exact moisture control is the subject of Niagara Blower Company's Bulletins 112 and 122, available at Buffalo, N. Y. Niagara's method of controlling humidity is very flexible, easy to maintain, compact and economical in operation. The cooling and heating functions of Niagara's equipment are completely separate from adding or removing moisture. It requires no moisture sensitive instruments.

Air Stirrers

LABORATORY air stirrers that are explosion proof, operate efficiently and economically are offered by Ace Glass, Inc., Vineland, N. J. These stirrers are durable, light in weight, quiet in operation, compact and variable in speeds. Several different models are available.

Variable Speed Motor

REEVES PULLEY CO., Columbus, Ind., offers a fractional horse power variable speed motor. It is compact and attractive in design, simple and accurate to operate. Over a hundred assemblies are available in ¼, ½, or ¾ h.p. units.

Pneumatic Conveyor

A line of pneumatic conveying systems that has been manufactured for over 10 years for handling many materials is available from Convair, Pittsburg, Pa. Among the many varieties of materials which are being conveyed include borax, caustics, coal, Fuller's earth, nails, paper, phosphates, sulfur and talc.

Three types of conveyors are available. They operate by vacuum, pressure or pressure-vacuum systems. The selection of the correct unit depends upon the work to be carried out, conveying rate and distances the materials are to be carried.

Unloading of raw materials, the delivery of mixed finished batches to storage bins and their use at times in conjuction with bagging machines and conveying to mixers are among the operations for which the systems are used.

The company maintains a well staffed engineering force for consultation, design and installation. Their experience in this field is available upon request. A pilot plant is also maintained for check-ups so that no liability is assumed by prospective customers. Their Bulletin No. 106 gives complete information to interested persons.

—— * ——

Fast Cleaning Filters

A line of filters for clarification of liquids and for solids recovery, claimed to be cleanable in less than 15 minutes, was introduced recently by Bart-Messing Corp., Belleville, N. J. In the "Sel-Rex Double Duty" line of filters the entire filtering element is secured to the hand tightened tank cover. The complete assembly lifts out as a unit for speedy washing. The filters can be used with either a stainless steel annular element or with a porous stone membrane. Conversion from one element to the other is said to take only a few moments.

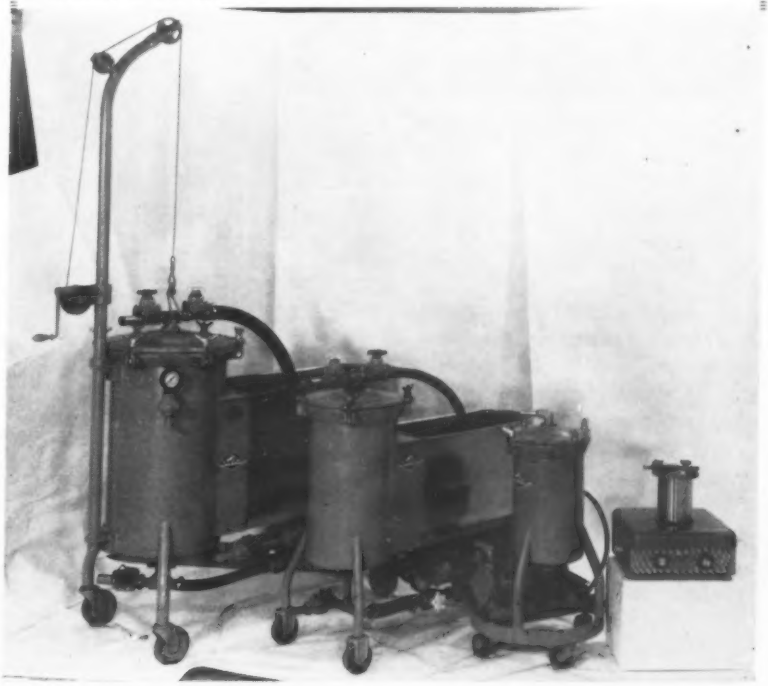
The new "Sel-Rex" filters are supplied as filters only or as complete filtration systems for either acid or alkali solutions. The filter unit alone consists of a filter tank with legs, tank cover, inlet and outlet ports and an assembled filter element. The complete filtration system includes the filter, pump and motor unit, precoat tank, valves, and necessary fittings. Standard portable or stationary models are available with capacities ranging from 250 to 18,000 gallons per hour. The units come in stainless steel with rubber lined components or all iron parts, depending on the specific application and the type of solution to be filtered. Larger models to meet specific requirements can be built.

—— * ——

P&G Quarterly Dividend

A quarterly dividend of 75 cents per share of common stock was declared last month by Procter & Gamble Co., Cincinnati.

Below are four portable model filters, typical of the complete, new line of Sel-Rex "double duty" filters, manufactured by the Bart-Messing Corp., of Belleville, N. J. From left to right, model BS-20, having a 2000 gph capacity (this model has hand operated davit to facilitate removal of element); model BS-6, with 1000 gph capacity; the "Little Giant" with an 800 gph capacity; and the portable "Streamliner," only 14 inches high by 14 inches square, with a capacity of 250 gph.



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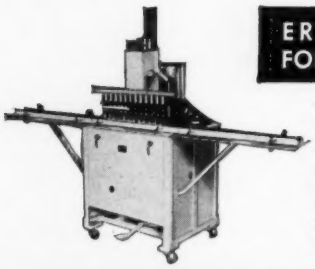
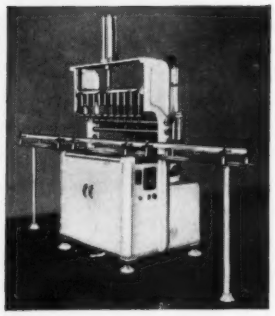


ERTEL ESA FILLER FOR SMALL BOTTLES

The most practical filler for small bottles in quantities of 40 to 60 per minute. To appreciate this unit it should be viewed in operation — the finest low cost trouble-free unit on the market.

ERTEL PNEUMO-VAC FILLER
Filling Range 3" to 13" High Bottle

For speeds up to 40 quarts per minute, this precision Ertel filler has no equal. New type spouts positively prevent drippage. Available with circulatory passages either bronze, plated, or stainless steel. Adjustments are simple and require but a few seconds time. If you have a filling problem see the Pneumo-Vac — it's designed for low cost operation.



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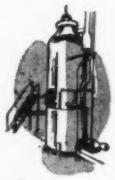

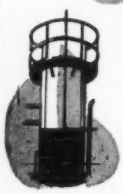

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- **Equipment and specifications to modernize your present plant.**

FILTREX Solvent Extraction—world's most versatile direct solvent extraction process for oils.

Continuous Fatty Acid Distillation—unsurpassed product quality—yields exceeding 99%.

Fat Splitting—high pressure non-catalytic and low pressure autoclave processes.

Hydrogenation—foremost designers of equipment for hardening fats, oils, fatty acids.

Oil Refining—for production of highest quality cooking and salad oils.

Glycerine Recovery and Refining—W&S equipment is the choice of large and small producers for efficiency of recovery.

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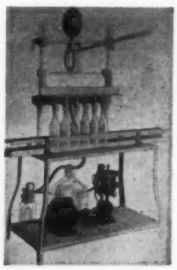

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Products and PROCESSES

Tin Chloride Soap Bleach

Stannous chloride is a better activator than phosphoric acid or persulfates in bleaching operations with sodium chlorite, because the oxidation-reduction system between stannous and stannic compounds favors release of oxygen by decomposition of sodium chlorite. In laboratory tests good bleaching effects were observed within 10 to 15 minutes when aqueous solutions of stannous chloride (0.6 to one percent) and immediately afterwards of sodium chlorite (0.3 to 0.4 percent) were added to soap at 80°C. Stability of the soap was also improved. Plant operations with eight to 10 tons of tallow, acid oils, and peanut-oil soap stocks in presence of 2 percent water gave bleaching effects comparable to those in the laboratory accompanied by distinct improvement in odor. Small iron plates were introduced into the reaction vessel to test corrosiveness of the reagents. A protective film of tin formed and the loss was only four mg per 25 square centimeter surface after the first two or three operations. Weight loss of plates was 106 mg per 25 square centimeter in the first operation. C. Paquot and Mme. M. Paquot, *Revue francaise corps gras* 2, p. 217, 1955.

—★—

Alcohol Base Surfactant

Surface active agents suitable as washing agents, emulsifiers, wetting agents, etc., result from esterification of sulfophthalic acid or its functional derivatives with alcohols or alcohol mixtures. The latter are obtained by adding carbon monoxide and hydrogen to compounds having olefinic double bonds in the presence of catalysts containing metals of Group VIII of the periodic table and pressure-hydrogenating the formed carbonyl compounds with hydrogen in the presence of suitable hydrogenation catalysts.

In an alternative procedure alcohol mixtures are used as esterification components which are prepared by treating CO with H in the presence of a catalyst containing metals of the Fe group at temperatures and pressures insufficient to effect formation of multimembered hydrocarbons.

In an example C_9-alcohol is obtained by addition of CO and H on diisobutylene in the presence of a Co catalyst with subsequent reduction of the carbonyl compound with H in the presence of a suitable hydrogenation catalyst. 87 parts of this C_9-alcohol mixed with 68 parts 4-sulfophthalic acid are treated with gaseous HCl at 70-80°, until esterification is complete. Excessive alcohol is removed by distillation and a readily water soluble product remains as residue. German patent 849,106, 1952, Cassella Farbwerke Mainkur A.-G., W. Zerweck and O. Troesken.

—★—

Syndet for Engine Sludge

Sludge formation in passenger car engines is controlled by a new ashless polymeric detergent. A dodecyl methacrylate diethylaminoethyl methacrylaceto polymer was found to minimize sludge formation in passenger car engines operated at low and moderate temperatures. These findings result from laboratory bench studies, laboratory engine tests and road tests. *Oil & Gas Journal*, 53, No. 44, p. 110, 1955. R. L. Willis and E. C. Ballard, E. I. du Pont de Nemours & Co., Wilmington

—★—

Stainless Rust Inhibitors

How to reduce staining of metal and improve protective properties of the sulfonate inhibitors commonly incorporated in lubricating oils is described in a report recently issued by the Office of Technical Services as PB 111572. Preservative compounds containing low price sulfonate inhibitors frequently leave stains which reduce corrosion resistance of metals, particularly precision ground parts. Experiments conducted at the Rock Island Arsenal Laboratory, Army Ordnance Corps, traced the trouble to two constitutents of commercial inhibitors: water-soluble sulfonates and inorganic salts. A special process was devised by which the sulfonates were "de-oiled" and then purified by extracting the solution with toluene. This reduced staining and improved protection. Entitled "An Investigation to Determine the Effect of Purification of Commercial Sulfonates on their Corrosion-Stain Property" the 20-page report may be ordered from OTS, U.S. Department of Commerce, Washington 25, D. C. Price is 50 cents

—★—

Monsanto Pentasulfide

Addition of phosphorus pentasulfide to the list of phosphorus derivatives available from the inorganic chemicals division of Monsanto Chemical Co., St. Louis, Mo., was announced recently by Tom K. Smith, Jr., divisional director of marketing. Insecticides and tiophosphates for oil and grease additives are among the applications of this compound, which is being produced at new facilities of the firm's Monsanto, Ill., plant.

—★—

Dow Ethanolamine Plant

Dow Chemical of Canada, Ltd., plans to build a million dollar ethanolamine plant at Sarnia, Ont., it was announced last month.

—★—

New Mona Amides

Mona Industries, Inc., Paterson, N. J., last month introduced an additional group of fatty acid amine condensates under the trade name "Monamid 150." Compared with former fatty acid amine condensates sold as 100 percent active this new series contains up to 50 percent more amide, according to Mona. Said to be practically odorless and very light in color, these products are suggested for detergency, wetting, foaming emulsifying, etc.

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protein
fatty acid
condensates

MAYPON 4 C

An anionic sudsing agent, detergent, and emulsifier ideally suited for use in the production of...

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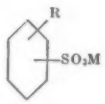
NEW Patents

The data listed below is only a brief review of recent patents pertinent to the readers and subscribers of this publication. Complete copies may be obtained by writing to the publisher of this magazine, Mac Nair-Dorland Co., 254 W. 31st Street, New York 1, N. Y., and remitting 50c for each copy desired. For orders received from outside of the United States the cost will be $1.00 per copy.

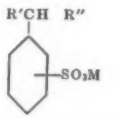
No. 2,709,687. Improved Solid Particulate Detergent Compositions, patented by Allen H. Lewis and Richard D. Stayner, Berkeley, Calif., assignors to California Research Corp., San Francisco, Calif. A solid, particle-form non-caking detergent composition is disclosed which contains in each 100 parts thereof from about 10 to about 95 parts by weight of sodium salts of monoalkyl benzene sulfonic acids having from 9 to 18 carbon atoms in the alkyl chain. The remainder of said 100 parts comprises essentially inorganic sodium salt builder and from about 0.5 to about 10% by weight of sodium salts of saturated aliphatic sulfonic acids containing from 1 to 6 carbon atoms in the aliphatic portion thereof, based on the combined weight of the detergent and builder ingredients.

No. 2,712,529. Detergent Composition, patented by Victor Mills, Wyoming, and Hans B. Stromberg and Clifford B. Kemp, Cincinnati, assignors to Procter & Gamble Co., Cincinnati. The patent covers a spray-dried detergent composition in granular form having particles of greatly improved resistance to breakdown, and having an outstanding freedom from dustiness, stickiness, caking and balling properties, as compared to like heat-dried compositions that do not contain the hereinafter mentioned solubilized silicate. The composition has the property of forming solutions substantially free of silicious floc and "sand-like" triphosphate agglomerates in water at washing concentrations, comprised essentially of one part of sodium triphosphate derived from an anhydrous triphosphate comprising at least about 60% Form II and not more than 40% nor less than 5% Form I, 0.2 to 4.0 parts of non-soap anionic synthetic detergent of the group consisting of water-soluble salts of sulfuric reaction products of alkyl and substituted alkyl compounds containing 8 to 18 carbon atoms in the alkyl group and mixtures thereof, characterized by their high solubility in water, their resistance to precipitation by mineral constituents of hard water and their surface active and effective detergent properties, and 0.07 to 1.2 parts of solubilized sodium silicate, the composition has a pH of at least 9.5 as measured in a 0.5 per cent solution in water at 25° C., and contains not less than about 4 per cent nor more than about 25 per cent of solubilized silicate solids and not less than 25 per cent total of synthetic detergent and triphosphate having been spray dried within less than 3 hours after the silicate was incorporated with the triphosphate-containing mixture.

No. 2,712,530. Sulfonate Detergent Blend, patented by Frederick Neil Baumgartner, Cranford, N. J., assignor to Esso Research and Engineering Co. A detergent composition is disclosed consisting essentially of a sulfonate compound (A) of the formula:



where R is a branched-chain alkyl radical of 9-18 carbon atoms and M is an alkali metal, and 2.5 to 50 wt % based on the total sulfonate blend, of a sulfonate compound (B) of the formula:



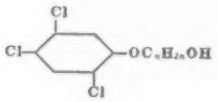
where R′ is a straight-chain alkyl radical of 1-5 carbon atoms, R″ is a straight-chain alkyl radical of 8-14 carbon atoms, where the sum of the carbon atoms in R′ and R″ is 9-15, and M is an alkali metal.

No. 2,714,094. Ceramic Surface Cleanser, patented by Michael J. McNally, Suffern, N. Y. Described is a ceramic surface cleansing composition of matter whose active ingredients consist essentially of (a) ammonium bi-fluoride, (b) ammonium chloride, and (c) a normally solid, water soluble and compatible detergent, the ratio by weight of (a) to (b) being 6-25 parts of (a) to 12-70 parts of (b) and the ratio by weight of (c) to the sum of the weights of (a) and (b) being 1 part of (c) to 18-95 parts of the sum of the weights of (a) and (b).

No. 2,713,188. Apparatus for Polishing Soap, patented by James Garvey, Vancouver, British Columbia, Canada. The patent covers apparatus for polishing soap comprising means for forming a soap bar, a platen, means for sliding the formed soap bar to be polished relatively to said platen and means for exerting a shear stress between the platen and the surface of the soap bar.

No. 2,713,535. Herbicidal Compositions, patented by Tracy M. Patrick, Jr., Melrose, Mass., assignor to Monsanto Chemical Co., St. Louis, Mo. Disclosed is a herbicidal composition comprising an oil-in-water emulsion of hexachlorobutadiene, said hexachlorobutadiene being present in the emulsion in a quantity which is toxic to plant life.

No. 2,712,990. Method and Composition for the Control of Undesired Vegetation, patented by Arthur W. Swezey, Garden Grove, Calif., assignor to The Dow Chemical Company, Midland, Mich. A method is disclosed for inhibiting the growth of vegetation which comprises the step of exposing seedling roots and germinating seed to the action of a growth-inhibiting amount of a compound having the formula



wherein n is an integer from 2 to 3, inclusive, such exposure being accomplished under conditions normally leading to the growth of the vegetation concerned.

No. 2,713,036. Antiseptic Soap Composition, patented by David J. Beaver, Richmond Heights, Roland S. Shumard, Brentwood, and Paul J. Stoffel, Florissant, Mo., assignors to Monsanto Chemical Co., St. Louis, Mo. The patent discloses a new compound, a 4-halo-α,α′-bis(5-nitro-2-hydroxyphenyl)-2,6-xylenol. (Claim 1) and an antiseptic detergent composition comprising the combination of a detergent soap and 0.5 to 10% by weight based upon the detergent soap of a compound of claim 1.

No. 2,714,093. Method of Preparing Detergent Compositions, patented by Armin Blumenthal, Johannesburg, Union of South Africa. Process of producing a non-soapy detergent composition in massive form is covered, which comprises melting together, at an elevated temperature not materially exceeding 100° C., 7 to 20 parts by weight of stearic acid, 2 to 16 parts by weight of a paraffin wax having a melting point lying between 52° and 60° C., and 0.5 to 2.0 parts by weight of an ester gum, continuing the heating and stirring until the bubble formation ceases, continuing the stirring without heating until the mixture assumes a creamy consistency, maturing the mixture by allowing it to stand for several days, preparing a hot aqueous solution of from 2.5 to 5.0 parts by weight of sodium carbonate, melting the matured mixture and thoroughly dispersing the same in said hot aqueous solution, with stirring, gradually adding to and thoroughly dispersing in the resulting hot partially emulsified mixture 5 to 15 parts by weight of a water-soluble alkyl benzene sulphonate detergent the length of the alkyl chain of which is from C_9 to C_{16}, serially incorporating 10 to 20 parts by weight of an inert filler and an aqueous suspension of 5 to 15 parts by weight of starch into the hot sulphonate-containing mass, raising the temperature of the

(*Turn to Page* 130)

FLORANOL

(AN ESTER)

Typical Specifications:

PHYSICAL APPEARANCE:	Light yellow liquid.
ODOR TYPE:	Fruity Rose.
SOLUBILITY:	45 parts soluble in 100 parts of 70% Ethyl Alcohol.
STABILITY:	Stable in the presence of alkalies.
REFRACTIVE INDEX $n\frac{20}{D}$:	1.4941
SPECIFIC GRAVITY $\frac{20}{20}$:	1.0510
QUALITY:	Specifications carefully checked in our modern control laboratories.
SUGGESTED USES:	As an addition to Rose compounds — 3% to 5% to impart the fruity floral note found in all Roses. Invaluable in Rose compositions for creams, powders, lotions, etc. Moderate in price.

Other VERONA Rose ingredients manufactured from synthetic raw materials produced entirely within the U.S.A.:

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SOAP PLANT *Observer*

By John W. McCutcheon

THE modern chemist travels extensively. If he is not going to a convention, he is returning from one. There are at least two main reasons why companies find it profitable to send their employees to meetings. Either they expect them to bring back vital information relating to their own products, or they expect them to present papers, thus acquainting customers with products or processes developed by the speaker's firm.

There are other reasons, too. Employers may be fearful of *not* permitting their employees to attend meetings. Chemists generally are sensitive fellows. They take their work seriously and are hurt if they are not selected to attend a meeting at which they feel they can learn something more about their field of interest.

The writer knows firsthand of a case in which the refusal of a company to pay a nine dollar registration fee for a meeting was a factor in the resignation of one of its employees.

It is a good idea for chemical company executives to review their policies with regard to the conventions their technical personnel are or should be attending. Medium size companies in particular seem to be lacking in a set policy on who of their employees attend what meetings.

In the first place, there are just too many meetings or conferences. This is the "conference age." The writer can hardly remember staying for three days at a hotel in a city of any size where some association or trade group was not holding a meeting. Obviously, it is impossible to attend all the meetings that might be of some interest. In the soap and detergent industry the principal meetings and their fields of coverage are listed below. The

comments are the writer's own personal opinions and are in no way intended to reflect on the aims and purposes of the organizations mentioned.

The Association of American Soap & Glycerine Producers, Inc., meets once a year at its annual convention in New York, generally held in January. This meeting is concerned largely with general business problems such as marketing, advertising, product trends, etc. Retail sales of household soaps and detergents are given special attention at AASGP meetings. These conventions are of special interest to sales and production managers, as well as executives concerned with current economic developments. There is also a meeting of AASGP's fatty acid division on the day prior to the formal opening of the regular soap industry meeting. At this all day session problems relating to production, specifications and applications of fatty acids are discussed. The glycerine, specialty soap and industrial soap divisions of the Soap Association meet separately during the annual convention to discuss technical, marketing and sales developments.

The Chemical Specialties Manufacturers Association meets twice a year, generally alternating between an eastern and mid-western city for its annual and mid-year meetings, respectively. Papers presented at CSMA meetings cover more specific problems in the manufacture and marketing of the complete range of household and automotive chemical specialties including aerosols, disinfectants, insecticides, soaps, detergents and sanitizers, waxes and floor finishes, etc. Also covered are application techniques, raw material specifications, and market potentials. Industrial products are given first consideration. Of special interest to technical sales and production representatives, these meetings also attract many executives of chemical specialty manufacturing firms who make valuable business contracts at these conventions.

The American Oil Chemists Society holds two meetings a year, generally one in the South during the Spring, devoted principally to oil chemistry and the fall meeting in Chicago or some northern city, which gives greater consideration to detergent problems. The papers generally cover research advances and modifications of analytical content. These meetings are particularly helpful to research chemists, chief works chemists, product research and development chemists, etc.

The American Chemical Society holds two meetings a year, Spring and Fall in various cities and generally covers groups of papers of interest to detergent chemists.

Although the papers are generally classed as "long hair," the scope covered presents a very wide interest from research on organic detergent materials to patent searching or report writing. The attention of research chemists, chemical engineers and librarians is directed to the menu of papers offered.

To the above may be added other various groups serving special purposes—such as the Essential Oil Association, the Toilet Goods Association, Inc., the Society of Cosmetic Chemists, the National Sanitary Supply Association.

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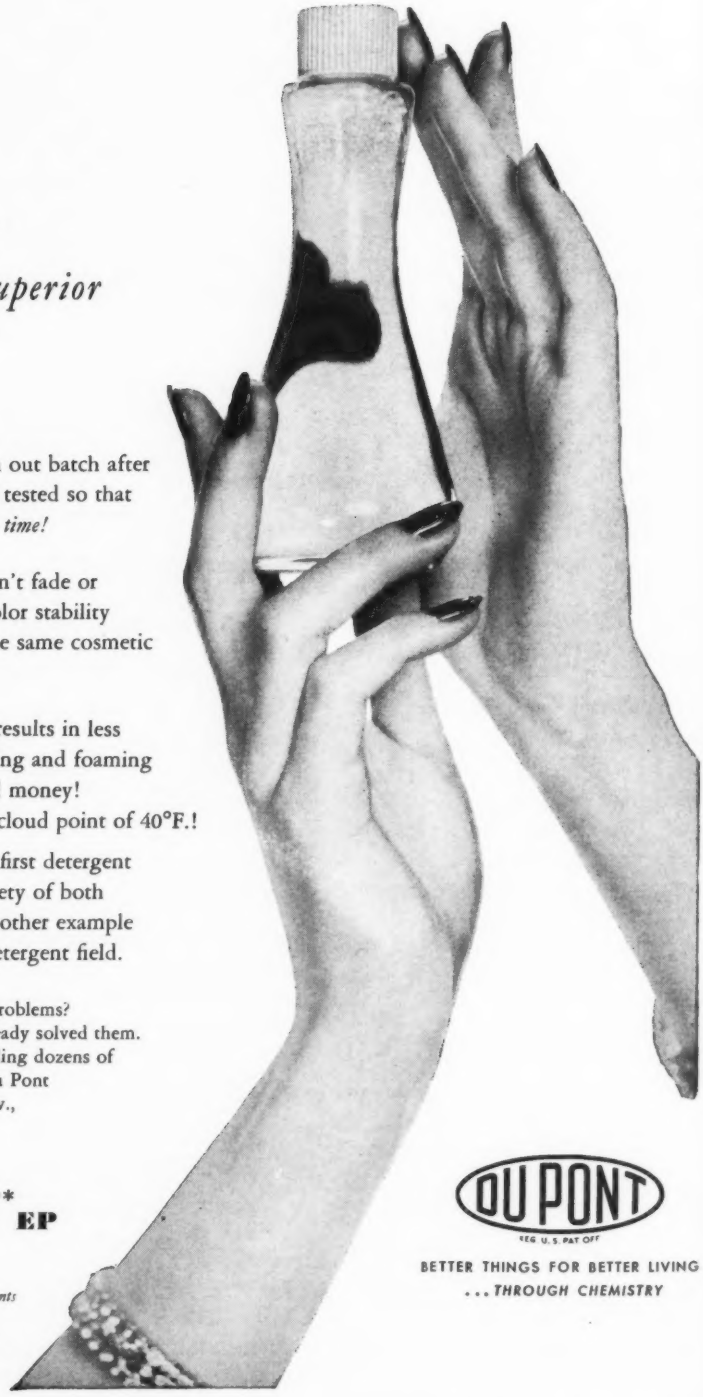
Today's finer
clear liquid shampoo



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for consistently superior
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UNIFORMITY is important when you turn out batch after batch of shampoo. DUPONOL EP is carefully tested so that you get the same, quality results *every single time!*

STABLE COLOR means your shampoo won't fade or discolor. And DUPONOL EP's outstanding color stability assures you that your shampoo will have the same cosmetic elegance on display as when it left you.

GREATER RESPONSE from DUPONOL EP results in less thickener . . . retention of important cleansing and foaming action . . . savings for you in both time and money! Further, DUPONOL EP has an amazingly low cloud point of 40°F.!

Save storage space, too! DUPONOL EP is the first detergent on the market to formulate into a wide variety of both clear liquid and liquid cream shampoos! Another example of Du Pont's continued leadership in the detergent field.

Do you need help with any shampoo formulating problems? If so, chances are Du Pont's technical staff has already solved them. You'll find answers in informative bulletins, including dozens of formulas. Write on company letterhead to: E. I. du Pont de Nemours & Co. (Inc.), Dyes and Chemicals Div., Wilmington 98, Del.

DU PONT *Duponol EP**
DETERGENT

**Du Pont Trade-Mark for Surface-Active Agents*

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BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

There are many others, too.

The following points may be helpful to management in organizing their plans to get the most for the least expense in having representatives at meetings.

(1) Select a group of key company individuals whose work would benefit by outside contacts.

(2) Set up an annual budget for convention expenses. This could easily be two to three percent of the total group salary as selected in 1 above.

(3) Broadly classify the individuals into groups according to the type of the convention, but be sufficiently elastic to keep a reasonable rotation and allow for personal preferences.

(4) Whether one individual attends a certain type convention regularly or intermittently depends largely on the nature of the contact desired. The writer much prefers an occasional visit to a variety of conventions.

(5) Look over the published programs in advance and plan what papers will be heard and by whom. When the convention is close to home, increase the number of representatives from your firm attending.

(6) Avoid requests of key individuals to attend conferences suggesting first that they attend. The selection of an individual to represent a firm at a convention is a moral booster that should not be regarded lightly.

(7) Always have a follow up to the convention by a report for those who could not attend. The foreman's weekly meeting, etc., may serve this purpose.

THE use of tin salts as a toilet soap preservative has been known and used for many years. First stannous chloride and then stannic chloride were used with success in trace amounts. A recent paper by C. Paquet & M. Paquot, *Rev. franc corps gras* 2, 217-21 (1955) now shows that the presence of stannous chloride acts as an activator for the sodium chlorite bleaching of soap. An abstract of this paper appears in the Products and Processes page (83) of this issue. Perhaps the preservative action of the tin salts has all along been due to this triggering action. One wonders if the sodium chlorite bleaching of fats would also be triggered by the presence of this tri salt? Attention Olin Mathieson Chemical Corp.!

* * *

SMALL arms gunpowder is coated with graphite by tumbling in a slowly rotating drum. This makes it easier to handle and less subject to premature explosion. Candy is sugar coated in the same way. It has often been the thought by the writer that certain specialty cleaners could well be made on the same principle, coating a high detergent base on a hard, water soluble kernel, to yield for example, a hand cleanser with special properties. A recent U. S. Patent 2,702,818 mentions work along these lines. It is a process for coating one detergent on another for free flowing purposes. In this case "Aerosol OT-100" was coated with "Aerosol IB" (diisobutyl sodium sulfosuccinate).

* * *

CONTINUOUS processing methods are rapidly being adopted for use in industry. Electric current moves mighty fast along a wire the size of a knitting needle and can be made to do a host of jobs. Holding relays, latch-in-relays, sequence relays, timing relays, thermal relays all can be made to cooperate in amazing ways. Not long ago the writer saw a compact set of such devices occupying a space of less than one cubic foot. The unit performed the following: moved a chemical solution into a reactor tank for a fixed period of time and then pumped it back to the original tank; repeated the above on five more tanks, after which it turned on heat, increased the agitation speed tenfold and later shut down the equipment, all automatically. In this operation each step was a batch job. Strictly it was not a continuous operation but rather the automatic control of a batch operation. Does it really matter, however? If the batch process being used can be so controlled that no manual attention is required, you have in substance the results of a continuous system. You also have the advantage of using batch technique if desired. Many so called continuous processing plants utilize a batch step now and then. For example, the neutralization of the sulfonic acid in a continuous sulfonator, the crutcher mix in a continuous spray-dry operation, the bleach step in continuous glycerine distillation, etc. For those interested, the writer will elaborate further on the equipment involved.

— * —

Sharples Book On Amines

A new 52-page book on aliphatic amines was published last month by Sharples Chemicals, Inc., 1100 Widener Building, Philadelphia 7. "Sharples Amines" carries sections on applications, chemical reactions, toxicology, and physical properties. The information given has been culled from more than 400 original literature sources. The physical properties section deals with more than 20 commercially available Sharples amines, whereas the sections on chemical reactions and applications include both Sharples and other aliphatic amines.

— * —

AOCS Meets Oct. 10-12

The fall meeting of the American Oil Chemists Society will be held at the Bellevue-Stratford Hotel, Philadelphia, October 10-12 under the chairmanship of P. E. Ronzone, C. F. Simonin's Sons, Inc., Philadelphia. At the annual meeting held recently in New Orleans announcement was made that section status had been granted to the North Central Oil Chemists' Society, of which N. W. Ziels, Lever Brothers Co., Hammond, Ind., is president. The fatty acid award set up by the Fatty Acid Division of the Association of American Soap and Glycerine Producers and to be administered by AOCS was also announced in New Orleans.

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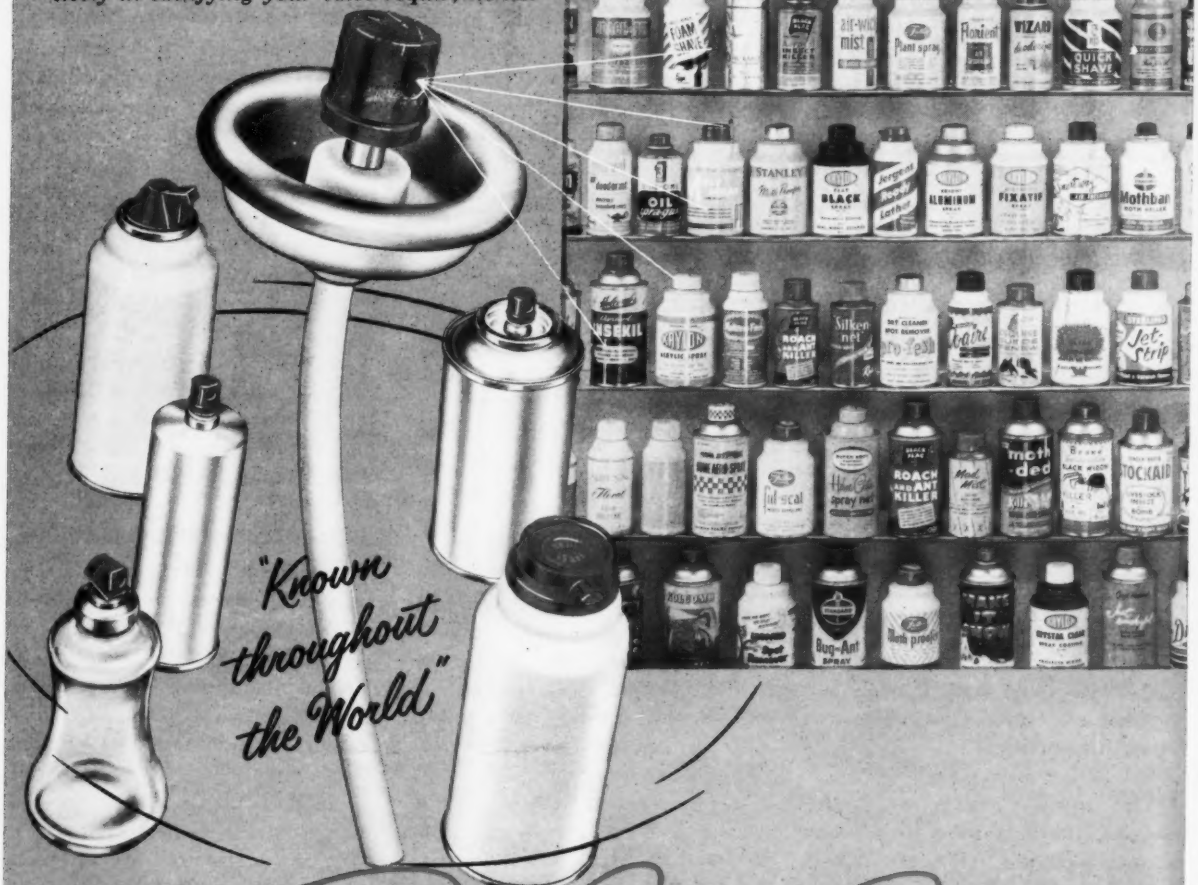
The picture tells a story... the story of overwhelming popularity, tremendous growth and continued reliance on a quality product... PRECISION VALVE.

The use of over 200,000,000 time-tested valves by hundreds of completely satisfied customers throughout the world, is your assurance that PRECISION has the answer to your aerosol program regardless of product or container.

We invite your inquiry to enable our staff of aerosol valve technicians to work cooperatively in satisfying your valve requirements.



PRECISION

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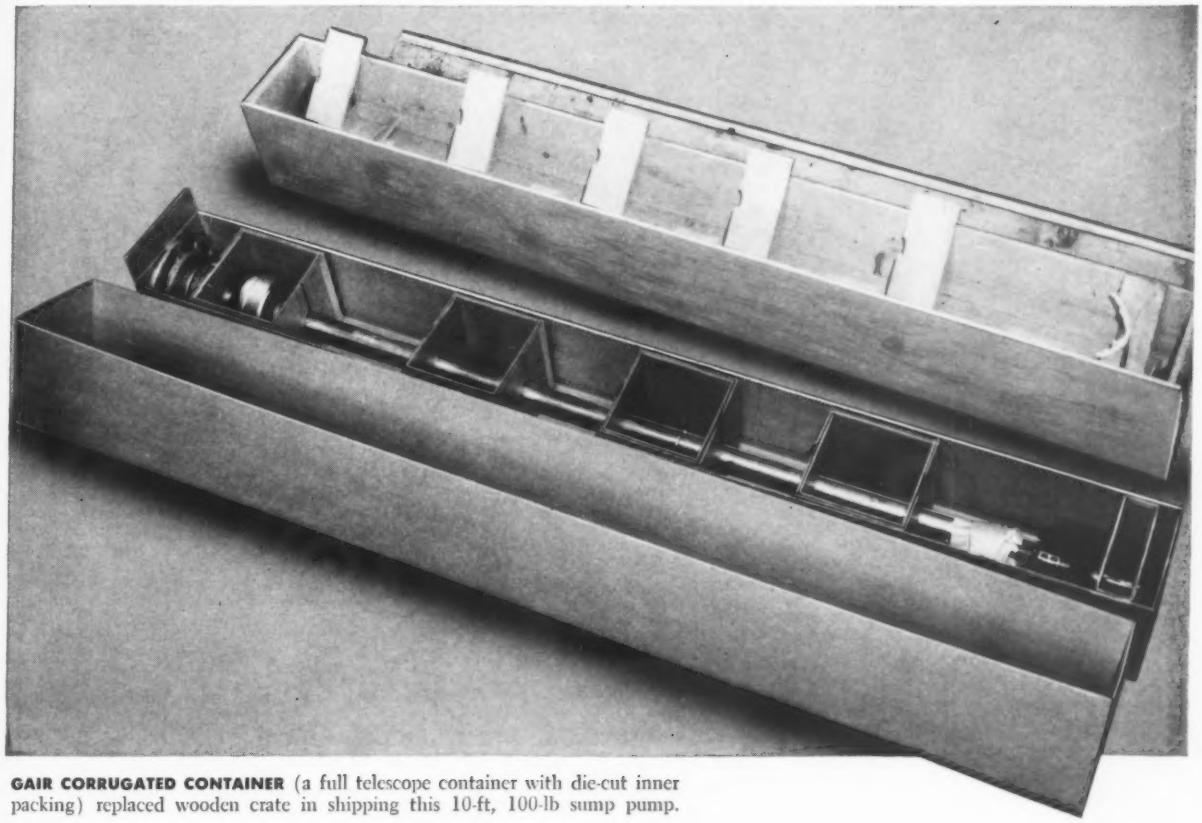
Switching FROM WOOD TO CORRUGATED SAVES PUMP FIRM $4.50 A SHIPPING CONTAINER



GAIR CORRUGATED CONTAINER (a full telescope container with die-cut inner packing) replaced wooden crate in shipping this 10-ft, 100-lb sump pump.

Production men at Detroit's Penberthy Injector Co. are wearing big smiles since they switched from wooden crates to Gair corrugated shipping containers.

Product involved was their ten-foot sump pump that tips the scales at more than 100 pounds. That's why Penberthy's shipping department wasn't sure at first that corrugated was strong enough for the job. Gair convinced them by a number of test shipments to various parts of the country — *no damage!*

Now one man packs thirteen complete containers an hour — it used to take two men that long to turn out nine to ten containers. This represents a savings in packing and materials of $4.50 per unit. Add the fact that the new container is 42 pounds lighter — three of them can be shipped for the price of two wooden crates — and you see why Penberthy has closed down its crating shop.

Interested in knowing what suggestions we might have for improving *your* packing and shipping program? Call your nearest Gair plant.

YOU'RE LIVING NEXT DOOR TO THE EXPERT

GAIR CONTAINER PLANTS: Atlanta, Ga. • Cambridge, Mass. • Cleveland, Ohio • Holyoke, Mass. • Jackson, Miss. • Los Angeles, Cal. • Martinsville, Va. • New Orleans, La. • No. Tonawanda, N. Y. • Philadelphia, Pa. • Plymouth, Mich. • Portland, Conn. • Richmond, Va. • Syracuse, N. Y. • Teterboro, N. J.

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November 1st...

Closing date for entries in the 1955 AEROSOL AWARDS package competition is November 1. Awards to be made at the 42nd Annual Meeting of the

CHEMICAL SPECIALTIES MANUFACTURERS ASSOCIATION

AT THE ROOSEVELT HOTEL, NEW YORK

DECEMBER 5-7, 1955

. . . to include judging and selecting of best aerosol packages of the year

Divided into ten classes as follows:

1. Insecticides, repellents, moth proofers.
2. Room deodorants.
3. Lacquers, enamels, other protective coatings; paint remover.
4. Other household products—polishes, glass cleaner, rug shampoo, water repellent, etc.
5. Shave products.
6. Hair preparations.
7. Other personal products — shampoo, body deodorants, sun tan oil, drugs, etc
8. Snow, all types.
9. Industrial products — lubricants, belt dressings, stencil inks, etc.
10. Glass and plastic packages — all products.

...a top award for "best in the show" will also be made

Rules of the contest:

1. All entries will be made in the name of the brand owner or marketer.

2. Entries will close November 1, 1955. All entries should be sent as soon after Sept. 20 as possible to the Committee at the CSMA office, and should comprise one completely assembled empty container with attached tag showing (a) name and address of brand owner, (b) class in which entry is made.

3. Only one entry may be made by any marketer or brand owner in any one class, but entries may be made in as many classes as desired.

4. Entries are open to any aerosol brand owner or marketer anywhere, and are not restricted to members of CSMA. There are no entry fees or other charges to entrants.

5. Best packages will be selected in ten classes and a "best package in the show" will be named. Judging will be done by a group of qualified experts. Their decisions will be final and will be announced and awards made at the 42nd annual meeting of CSMA in New York.

For entry blanks or information, write to
AEROSOL AWARDS COMMITTEE
Chemical Specialties Manufacturers Association
50 East 41st St., New York 17, N. Y.

Make Plans for Your Entries Now!

ABP

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CAN PUT MORE PROFIT IN PACKAGED CHEMICALS TOO!

Nearly everyone knows packaging with paper bags can step up sales, increase profits and cut costs for food processors—but did you know paper bags can do as much for manufacturers of packaged chemicals?

ABP, originators of famous Kard-O-Pak and other bags, can *prove** it! ABP can give you standard or specially-designed bags that are even more functional than many old-fashioned drums and containers! We can give you bags that are airtight and waterproof, to prevent product deterioration . . . that are compact for easier handling and storage . . . light for more economical shipping . . . conveniently-sized to prevent user waste! ABP Bags fill effortlessly and seal quickly on automatic packaging equipment.

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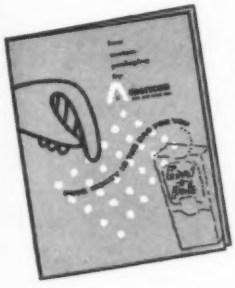

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...if you have an aerosol project
...if you have an aerosol problem

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HELP YOU . . . Tens of millions of successfully selling aerosols are custom formulated and/or filled by G. Barr & Company for many of the nation's leading concerns. These are testimonials of leadership . . . earned through outstanding aerosol research laboratories . . . creative product development . . . meticulous quality control . . . effective production economies. And . . . G. Barr & Company markets no products of its own.

Whether you need help in developing a new aerosol idea or in filling a current product . . . whether you need 1,000 units or a million per week, G. Barr & Company's three aerosol filling plants—New York, Chicago, Los Angeles, can take care of your requirements now. Three key locations to assure you of freight savings and on-schedule delivery.

- *Aerosol filling by refrigeration or pressure.*
- *Aerosol packaging in metal, plastic, and glass containers.*
- *Aerosols as sprays, foams, powders.*
- *Aerosol cosmetics, insecticides, pharmaceuticals, waxes, cleaners, polishes, household products . . . your new product idea.*

Address inquiries to: 3601 S. Racine Avenue, Chicago 9, Illinois

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Plants in: New York • Chicago • Los Angeles

There's a PLAX Package for products that need the SOFT touch

Soft, warm feel of the Plax bottle makes it ideal for products that must be used with care and delicacy. The surface can be smooth, pebbled, frosted and embossed in almost any design. Choice of colors and shape is almost unlimited.

You can select the best dispensing method for your product from more than 50 different fitments — spray, drop-by-drop, direct application or controlled pouring. What's more, lightweight Plax bottles can save you hundreds of thousands of dollars in shipping costs. Consult Plax for the best in convenience packaging.

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In plastic bottle packaging, only Plax offers continuous research, complete design service, and long experience.

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RHEEM FIBRE DRUMS HELP BUSY SHIPPERS KEEP UP WITH THE CALENDAR

Time is money! That's why Rheem's distribution system, which covers more major markets faster, is so important to you.

To meet tight shipping schedules, you must have the shipping containers you need *when you need them.*

Rheem Fibre Drums help you keep up with the calendar by being readily available to major shipping points on the East Coast, in the Midwest, and on the West Coast. In many cases, they can be shipped by *truck* and *delivered right at the point of use.* This not only saves time, but also cuts handling costs.

Rheem Fibre Drums are inexpensive, lightweight, "tailor-made" containers, offering an amazingly tight seal and sturdy protection for your product.

For complete information of how Rheem Fibre Drums can save you time and money, write today to the Rheem office nearest you.

Did you know these facts about Rheem Fibre Drums?

1. They can be colorfully decorated, at low cost, through the silk screen process, or labels may be used.
2. Special interior linings can be applied to give the proper protection to a wide variety of products requiring it.
3. Special laminates can be built into the drum walls to provide an added moisture barrier without adding greatly to the cost.
4. The light weight of sturdy, durable, economical Rheem Fibre Drums reduces shipping costs. Empty drums can be nested to save space.

Switch in time, Switch to Rheem Fibre Drums

About ⅓ the weight of steel— and less than ½ the cost!

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Packaging NOTES

Egan Packaging Head

A new integrated organization to consolidate all packaging activities of Colgate-Palmolive Co., Jersey City, N. J., has been formed and W. T. Egan has been named director of packaging, it was announced late last month by William L. Sims II, president. Mr. Egan joined Colgate in 1916 and has held the post of assistant research director since 1950. As director of packaging he coordinates all packaging operations such as development work, engineering, art, cost analysis, evaluation, etc., which were formerly handled by different departments. In announcing creation of the packaging organization Mr. Sims said that the move reflects the importance of packaging in modern merchandizing.

William T. Egan

—★—

Curtis Becomes V. P.

Package Machinery Co., Springfield, Mass., elected Lewis A. Curtis as vice-president in charge of sales, it was announced last month by Roe S. Clark, president. Formerly general sales manager of the company, Mr. Curtis had been sales representative for F. D. Palmer Co., Chicago, when the latter was bought by Package Machinery in 1949.

Roger L. Putnam, chairman of the company, had been acting director of sales. He now relinquishes this post to devote more time to the firm's Reed-Prentice division, of which he is president.

—★—

Gair Advances Jones

Christopher Peter Jones has been appointed sales manager of the "Plastafol" department, folding cartons division, of Robert Gair Co., New York, it was announced recently. Mr. Jones was a multiple-packaging salesman prior to his recent appointment.

—★—

Raises Drum Prices

The Container Division of Jones & Laughlin Steel Corp., Pittsburgh, recently announced price increases on steel shipping pails and drums. The increases will amount to seven and one half percent on containers made from cold rolled steel and approximately seven percent on those made from hot rolled steel.

—★—

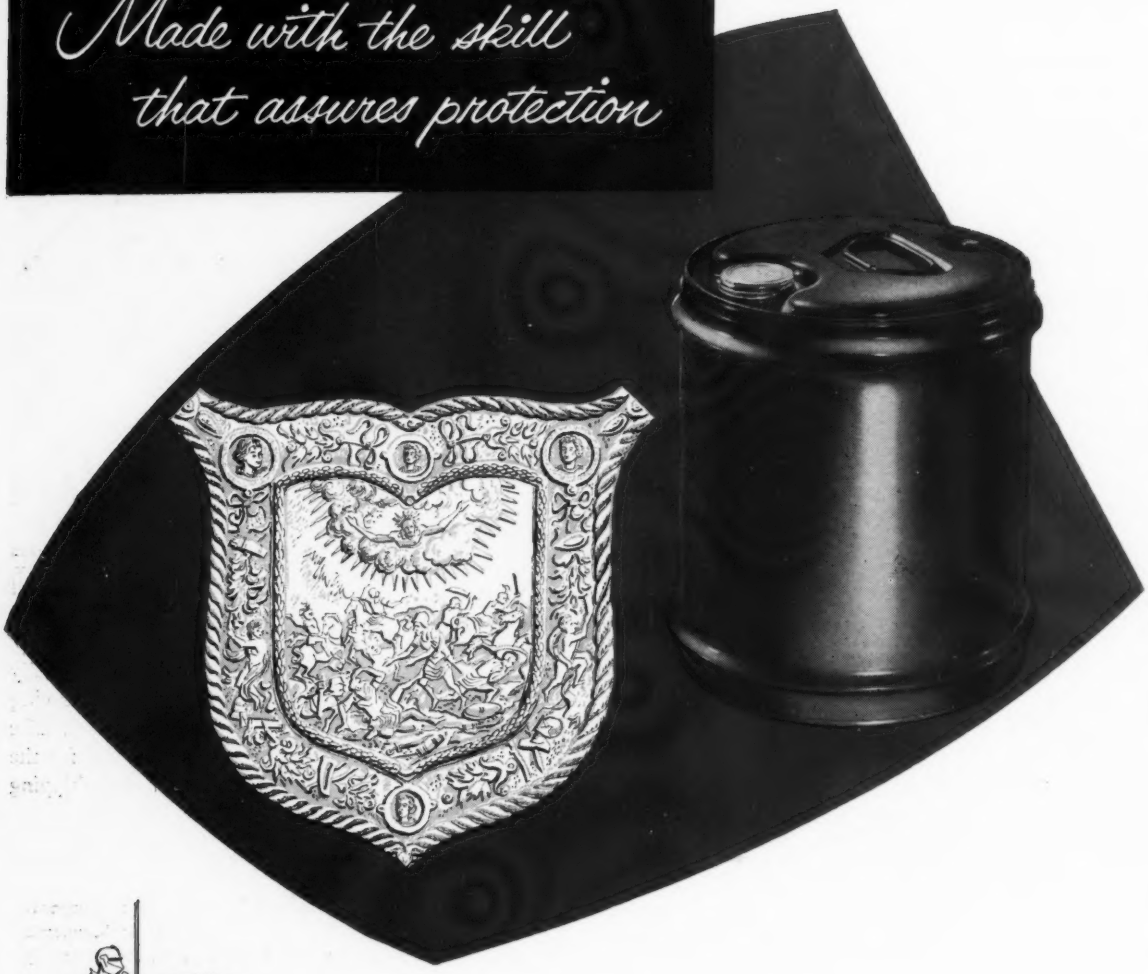
New Vulcan Production Line

Vulcan Steel Container Co., Birmingham, Ala., has completed installation of an additional steel pail production line, it was announced recently by Gordon D. Zuck, president. The new line increases the company's capacity for production of pails and drums by over 60 percent. It will also add substantially to the firm's capacity for producing pails with "Hi-bake" interiors. The firm is planning another line for the manufacture of larger steel shipping containers.

Joseph Drummey has joined the sales force of Brockway Glass Co., Brockway, Pa., it was announced recently. He will be located in the firm's Boston sales office.

Lithographed galvanized steel pail, made by Jones & Laughlin Steel Corporation's Container Division plant in Toledo, Ohio, as a container for Monsanto Chemical Company's detergent, "All," is inspected as it comes off the assembly line by H. J. Kennedy, manager of galvanized ware sales, for the Container Division. The pails, which hold 25 pounds of the detergent, find many re-uses by home-makers.

Made with the skill that assures protection



This superbly carved and inlaid shield is a product of skillful 16th Century armor-making. Its dimensions and balance permit easy handling. The intricate carving and embossment reveal it as a materpiece of sculpture. And most important of all, the sturdy construction and careful design gave maximum protection to the warrior who carried it in battle.

Jones & Laughlin Steel Containers provide dependable protection for your products. They are built of sturdy, high-quality J&L Steel Sheet. Careful manufacture assures accuracy in all fittings and closures. J&L containers have a trim appearance which can be decorated attractively with colorful designs and illustrations by means of J&L's lithographic process.

Coatings and lacquers are evenly applied—both inside and outside. J&L pails and drums are chemically treated to keep all surfaces clean and dry.

Depend on J&L Steel Containers for the protection your products require.

Order them through plants in leading industrial centers. You will find J&L service prompt and efficient.

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STEEL CORPORATION

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J&L STEEL

AMA Packaging Clinic on Filling

"HOW to Control Underfill and Excessive Overfill on Powder, Liquid and Cream Package Filling Equipment" was the theme of the three-day packaging clinic held at the Sheraton Astor Hotel, New York, July 26-27-28, by the American Management Association. The bearing of federal and state legislation on filling procedures was outlined by Sumner C. Rowe of the Food and Drug Administration, Washington, D.C., and by John P. McBride, Department of Labor and Industries, Commonwealth of Massachusetts, respectively.

Product uniformity, basic accuracy of fillers, and operating conditions and controls are the essential problems in package fill variations according to a talk given by John A. Warren, technical adviser, packaging division of AMA. To illustrate these problems and their solutions, various case histories of packaging statistical quality control programs were presented by a panel of five. This panel included Thomas J. Brady, chief control chemist at Mennen Co., Morristown, N.J., who described weight checking of "Foam Shave," a pressure packaged product. A piece of recording equipment able to compensate for the can plus top plus soap weight before gassing was required. The solution was provided by a tare compensating scale improvised upon and attached to a "Datamatic" weight calculator (Scale Specialties, Inc., Roseland, N.J.). The improvisations had to allow checking of two gassers and recording of the weight of each gasser, identifying the gasser recorded, and keeping a running check on the overweight and underweight and units checked per gasser. With this machine approximately two percent of the total production going through the line can be checkweighed, compared with three quarters of one percent prior to its installation.

In a paper entitled "Package Check Weighing," Roger L. Merrill, Battelle Memorial Institute, Columbus, O., gave the following main objectives of any checkweighing system: (1) to insure customer satisfaction by maintaining a tolerance of weight variation consistent with the over-all product quality standards as established by company policy; (2) to protect the packer against economic loss due to excessive overfill or, stated more accurately, to provide the most economic weight-control system considering equipment cost, wages, and product loss due to overfill; (3) to protect the packer against violations of weights and measures laws. Mr. Merrill classified checkweighing systems into four basic types: (1) Spot checkweighing with control based on operator's judgment; (2) spot checkweighing with statistical control; (3) automatic 100 percent checkweighing with control based on an operator's monitoring the reject gates; (4) automatic 100 percent checkweighing with automatic statistical control. Variations and combinations of these systems are possible.

The first step in selecting a checkweighing system is determination of the standard deviation. An extensive statistical analysis of the line performance should be made for this purpose. Selection should then be made on the basis of: (1) standard deviation of the line; (2) pattern of variability resulting from assignable causes; (3) company policy regarding product quality; and (4) capital equipment and operation costs. A form of spot-check control may be adequate if the package weight variations are statistically stable and it is not essential to assure that 100 percent of the outgoing product is within selected tolerances.

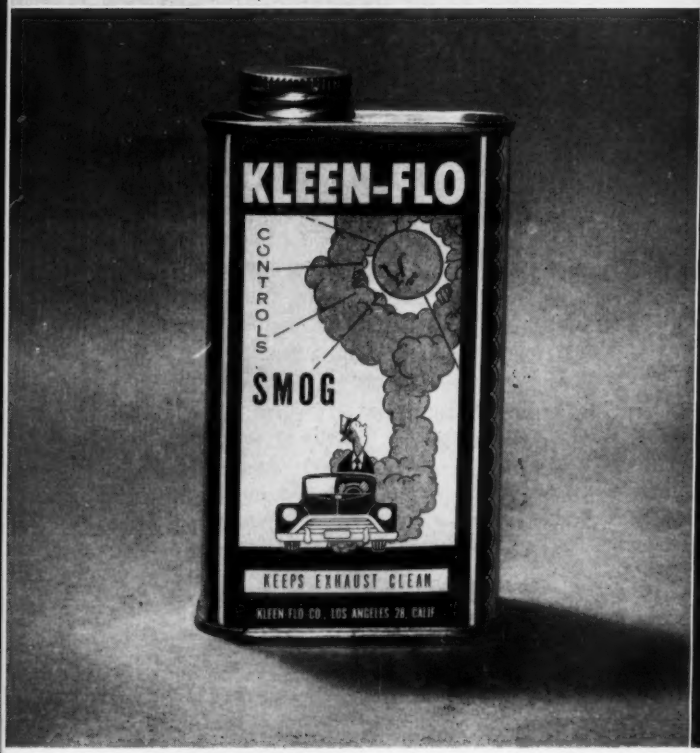
A panel on powder filling equipment included a paper by William P. Schommer, General Mills, Inc., Minneapolis, describing net weight weighers and gross weight weighers, their respective fields of application and limitations. He summarized his advice as follows: (1) Be sure you have the proper type of equipment for the product you are packaging. (2) Work closely with your machinery manufacturer in determining the type and design of feed hoppers, bins, conveyors, etc. These are vitally important items in any filling operations. (3) Set up and maintain a good sanitation and maintenance program. (4) Train your operators thoroughly, so that they understand the equipment, how it functions, etc. (5) Use statistical quality control techniques for sampling and control. (6) Last but not least, don't be "speed happy." Each type of weigher has its limitations and if you attempt to run much faster than the speed specified by the manufacturer, you can look for inaccuracies in your filling operations.

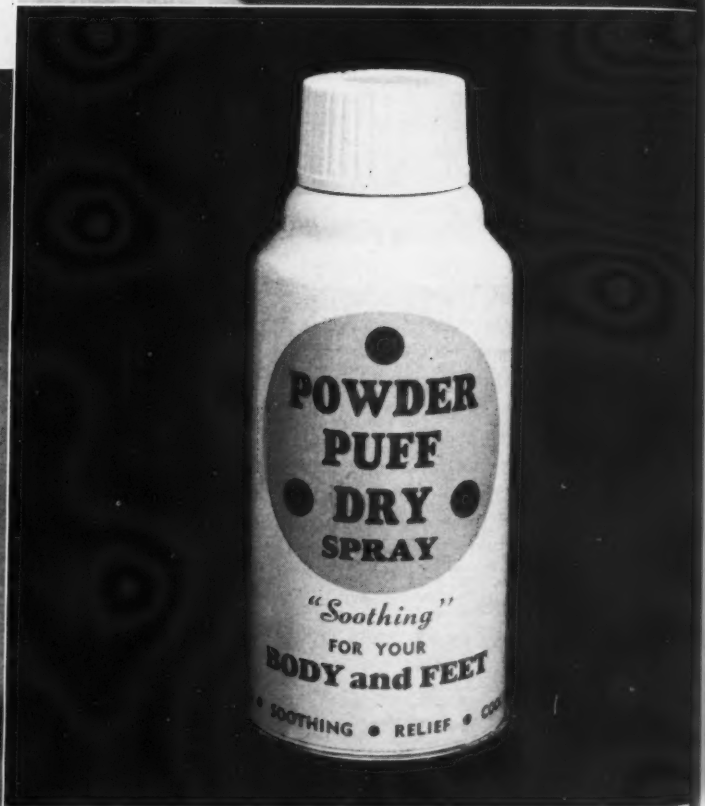
On the same panel E. W. Bleam, Stokes and Smith Co., Philadelphia, presented "Facts About Auger Filling." Mr. Bleam described auger filling as "a means of conveying a non-free-flowing material, usually vertically downward, by means of a screw, better known as an auger, from a hopper or material reservoir, into a container." The auger is a feeding medium employed by many types of filling machines, and in various methods including volume filling, pack filling, and gross weight filling. Several types of augers are available for the most efficient handling of different products and containers. Auger filling is suitable for almost any powdered, granular (free-flowing or non-free flowing), and certain semi-solid materials. All major factors important to accuracy of fill were reviewed in detail by Mr. Bleam.

Liquid Filling

A PANEL on liquid filling included a presentation on premeasured filling by George A. Craig, Machinery Service Co., Louisville, Ky. Rotary predetermined filling machines effect significant savings in over-fill. Whereas vacuum and

(*Turn to Page* 107)





New "A-S-R Surgical Soap" of American Safety Razor Corp., Brooklyn, contains hexachlorophene and lanolin. It is designed for use by staff members, patients and for pre-operative antisepsis of the skin in hospitals, and for use in industrial clinics, first aid stations and in the office and home. Soap is green in color.

Dishwasher "All," repackaged and renamed detergent of Monsanto Chemical Co., St. Louis, for electric dishwashers, was announced recently. Gardner Board & Carton Co., Middletown, Ohio, supplies the carton, which is covered with a Reynolds Metal aluminum foil wrap. Filler is Paket, Inc., Chicago.

New automobile smog-control liquid, Kleen-Flo Co., Los Angeles, is packed in half-pint metal can of American Can Co., New York. Can features screw cap nozzle and an around-the-can lithographed label of red, white and blue.

As the name implies "Powder Puff Dry Spray," new aerosol dispensed dry powder, is for use on feet to keep them dry, cool and fresh after showering. New product of James Varley & Sons, Inc., St. Louis, contains hexachlorophene, talc and perfume.

New "Resipel" biting fly repellent for use on beef and dairy cattle was announced recently by Residex Corp., Linden, N. J. Product combines "Crag" fly repellent of Carbide and Carbon Chemicals Co., New York, and methoxychlor. Packed in quart, gallon bottles.

"Win-tone," new wax treatment for vinyl flooring was introduced last month by Windsor Wax Co., Hoboken, N. J. The product cleans and preserves vinyl floors, according to the maker.

Recent additions to line of Clean-O Chemical Co., Bronx, include pine liquid soap, liquid starch and pine jelly soap. Bottles by Maryland Glass Co., Baltimore; caps are by Crown Cork & Seal Co., Baltimore. The soap products retail for 29 cents; starch is 23 cents.

Fully transparent "Plastafol" cartons which are displayed in a Gair-Reynolds "Foiline" carton are used for "Blue Foam" soap in a tube, made by Zotox Pharmacal Co., Stamford, Conn. Carton is designed and produced at the Gair Cartons Division, Piermont, N. Y., of Robert Gair Co., New York.

CALL Ball and GET MORE THAN GLASS!

BALL TECHNICAL SERVICE

can help you
cut costs, improve quality

Ball customers receive not only quality glass containers and metal closures that meet their most exacting specifications, but also—on request—counsel from experienced technicians on any production problem. Here are some of the many ways our staff of specialists may be able to assist you:

- Determining the types of machinery and equipment best adapted to processing and packaging your products.
- Improving your present processing methods.
- Increasing your production flow and line capacity.
- Choosing the kind of glass container to give your products the greatest possible sales appeal.

A CASE HISTORY

Production costs were getting out of hand for a midwest pickle packer. He had been advised that the only solution was a major investment in new machinery, but this was beyond his means. Early in 1954 he called in Ball Technical Service, which outlined a plan for completely rearranging his lines using most of the existing equipment and the labor of plant maintenance personnel. With a relatively small outlay for materials, he doubled his output and cut production cost per unit almost in half. Sounds fantastic—but it's true! Another case where it paid to call Ball first of all.

Ask about other Ball "Packaging Plus" services . . . glass container design; materials handling; packaging research; processing and filling—with experts in each area who can help you reduce costs or increase profits.

Ball

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(*From Page* 103)

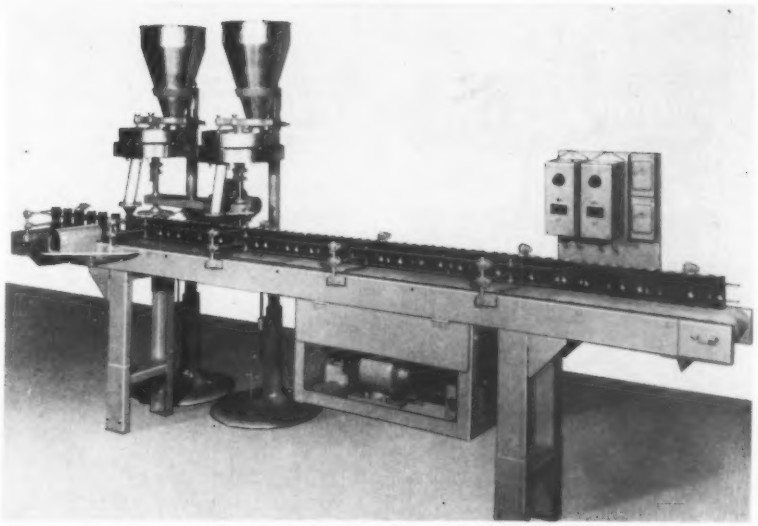
gravity fillers depend on the accuracy of the container volume for a measure of the correct fill, premeasured filling eliminates this source of error, which is least significant in round tin cans and presents the greatest problem in glass and polyethylene containers.

Edward Love, Bristol-Myers Co., Hillside, N.J., spoke on the filling of viscous and creamy products into collapsible tubes and glass jars. He stressed the necessity of a control chart and listed the following points which he considers most helpful in obtaining accurate fills: Location of filler and storage should make for shortest possible lines. Temperature and viscosity and density of the product are of major importance. Uniform specific gravity must be maintained. Machining of the pumps, their measuring cylinders, etc., must be accurate. Use of gauges is recommended to set stroke of piston and the height of filling stem. Relation between rate of fill and stem withdrawal must be correctly set. A mill should be used to remove air and control consistency. Constant head pressure is maintained by pressurized hoppers and by-pass return to suction side of pump. Drip is controlled in stringy materials by air blow-off, suck back, nozzle design, and quick withdrawal; in liquids by nozzle design, screens, suck back and vacuum. Other suggestions include lost motion link on dual head fillers, no-fill devices, small piston size and long stroke, close control of time element between manufacturing and fill. Types of pumps recommended by Mr. Love include gear pumps with measuring cylinders and piston pumps. He suggested sleeve valves or oscillating cylinder valves with outer sleeves for pistons.

—★—

New Automatic Filler

A new, automatic, multiple-head filling machine was introduced recently by Stuyvesant Engineering Co., Lyndhurst, N. J. The "Fillmaster" fills dry and semi-dry, free or slow flowing products into any type rigid containers at speeds of up to 240 per minute (up to 360 per minute with an additional head). Each container, having travelled to the filling head on the conveyor belt, is automatically stopped, filled, and moved along, ready for capping. Vibrators are available to settle products which might overflow and a no-can-no-fill device prevents spillage. Only one operator is required to handle the operation. The unit can be used to fill two different products (or more than two with additional heads) into the same container. Fillers can be placed on either side of the conveyor and at various points along the conveyor. An electrically operated device controls the automatic positioning of the containers at the fillers.



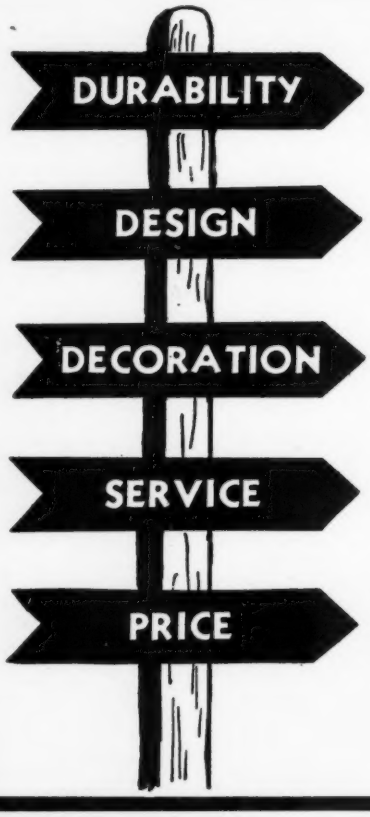
New automatic, multiple head, filling machine of Stuyvesant Engineering Co., Lyndhurst, N. J. It fills dry and semi-dry, free or slow flowing products into any type rigid container.

—★—

Non-Corrosive Lining

A non-corrosive lining for the protection of all types of metal containers against corrosive chemicals is being marketed by Joclin Manufacturing Co., North Haven, Conn., it was announced last month by A. S. Hackley, sales manager. "Fluorolin 202" is described as combining the chemical inertness of

New non-corrosive lining for all types of metal containers to protect against corrosion. Now being marketed by Joclin Manufacturing Co., North Haven, Conn.



Eastern's superior workmanship guarantees strong, durable containers that will take your product safely to market.

Eastern's experts can be of major assistance in designing packages that win sales success.

Eastern is noted for top-quality lithography on every shipment.

No costly interruptions with Eastern's service — shipments arrive when and where you specify.

Eastern's advantages available at competitive prices because of our modern plant and long experience.

All Signs Point to EASTERN *for Distinctive* PACKAGING

Start on the road to a distinctive package for your waxes, cleaners, polishes and other specialties by calling in Eastern. Plain or lithographed — a package by Eastern guarantees satisfaction for both you and the consumer.

Further details available without obligation

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Aerosol Performance?

Check the advantages of these New Valves

- Faster pressure filling
- Designed to handle every type product
- New and improved design eliminates clogging
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Our technical staff is available for consultation on your aerosol valve problems without cost or obligation to you.

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"Kel-F" with the mechanical rigidity of aluminum foil, spread-coated with pressure-sensitive adhesive. Linings are cut out, assembled on the job, and pressed into place like wallpaper. Joints may be butted and sealed with strips of the same material. Only tools required are a straight edge and shears.

— ★ —

Wisinski a Superintendent

William Wisinski has been appointed superintendent of the Los Angeles corrugated box division of Robert Gair Co., New York. He started with Gair 23 years ago as an operator on the corrugator in Bogota. Since then he has been general foreman at the Teterboro, N. J., plant, and since September 1954, general foreman of the Angelus plant.

— ★ —

Drum Figures, Specs.

Production of steel shipping containers during the first half of 1955 has increased 8.8 percent over the same period of last year, it was announced recently by the Steel Shipping Container Institute, New York. Total output amounted to 12.17 million heavy drums, 4.33 million light drums, and 36.66 million pails (12-gallons or less), the latest Bureau of the Census figures showed. When making the announcement, Livingston Keplinger, the institute's president, attributed the increase to the following major factors: greater emphasis on container linings and surface treatments, steps taken to standardize drum specifications, and the expanding use of decorated containers.

The importance of linings is apparent from the fact that the chemical industry, with more hard-to-package products than any other industry, now accounts for about 35 percent of new drums and 17 percent of pails produced, compared with approximately 22 percent from 1947 to 1949.

Recommended universal standard specifications for 10 types of steel shipping containers have resulted from joint studies by the institute and other associations representing major consuming industries. The Manufacturing Chemists' Association through its metal packages committee has participated in the development of these standards and adopted them last month.

The use of lithographed 55-gallon drums as an advertising medium is a comparatively recent development, Mr. Keplinger pointed out. Smaller lithographed containers have been used in this manner for a long time.

"JaLiner" Bulletin

A brochure supplying descriptive and uses information on "JaLiner" is available from Jones & Laughlin Steel Corp., Container Division, 405 Lexington Avenue, New York 17. The built-in polyethylene liner for steel containers was described and illustrated on Page 83 in the Packaging Notes section of the June, 1955 issue of *Soap and Chemical Specialties.*

We've got that Southern Accent

Yes, friends, we've got that SOUTHERN ACCENT, and that *accent* is on production of TOP-QUALITY Steel Pails and Drums and on SPEED of delivery . . . for SOUTHERN CUSTOMERS.

Large capacity and flexibility of production, a sizable warehouse stock of ALL popular sizes and types of Steel Pails, plus central location right in the heart of the Industrial South, assures quick deliveries when time means money to you.

VULCAN IS SERVING THE SOUTH WITH TOP-QUALITY PAILS AND DRUMS

Vulcan makes a full line of Steel Pails and Drums to meet YOUR needs—1½ to 8 gallon sizes . . . open head or closed head . . . plain covers or those built with all popular pouring openings . . . special Hi-Baked Lined to protect your product . . . Open Head Lug Cover . . . Tight Head Drum Type.

Made in the "HEART O' DIXIE"

Vulcan Pails can be colorfully lithographed with your name or sales message

Samples and prices furnished on request.

VULCAN STEEL CONTAINER CO.

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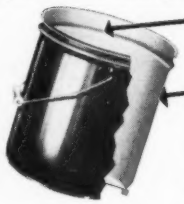

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Bids and AWARDS

V. A. Award to Comfort

In a recent opening for miscellaneous supplies by the Veterans Administration, Washington, D. C., the award on dentifrice tooth paste was received by Comfort Mfg. Co., Chicago, with the following low bids: item 1, 81 cents; item 2, 89 cents; item 3, 75 cents. May 24, inv. S-352.

— ★ —

Low FSS Soap Bids

Colgate-Palmolive Co., Jersey City, N. J., and Columbia Oil Co., St. Louis, both submitted low bids on soap in a recent opening for miscellaneous supplies by the Federal Supply Service, Kansas City, Mo. Colgate bid 11.41 cents on item 1, case $3.65, and Columbia bid 12.3 cents on item 2, and 68.5 cents on item 3. June 24, inv. KC-39423.

— ★ —

Metal Polish Awards

In a recent opening for miscellaneous supplies by the Federal Supply Service, San Francisco, the awards on metal polish went to the following low bidders: C. P. Baker Co., Philadelphia, items 1a, and 1b, 5,000 cans, 21.9 cents, item 1c, 5,000 cans, 12.7 cents; Cosmopolitan Products, Los Angeles, item 2a, 1,000 cans, 32 cents, item 2b, 1,000 cans, 30.5 cents. No award made for item 2, 1,000 cans. May 31, inv. SF-8491.

— ★ —

Low Murro Soap Bid

Murro Chemical Co., Portsmouth, Va., submitted the low bid of $3.65 on soap in a recent opening for miscellaneous supplies by the Federal Supply Service, Atlanta. June 28, inv. 28028.

— ★ —

FSS Soap Awards

In a recent opening for miscellaneous supplies by the Federal Supply Service, Dallas, the awards on soap went to the following low bidders: Davies-Young Soap Co., Dayton, O., item 1, 30,800 pounds, 11.25 cents, fob destination; Procter & Gamble Distributing Co., Cincinnati, item 2, 38,737 pounds, 11.41 cents, fob destination. May 31, inv. 43203.

— ★ —

Low Bowl Cleaner Bids

In a recent opening for miscellaneous supplies by the Federal Supply Service, Denver, the following low bids on toilet bowl cleaner were submitted: Climalene Co., Canton, Ohio, item 1, 14.5 cents, item 1a, 11 cents; Champion Chemical Works, New York, item 2, 6.4375 cents; Pal Products Mfg. Corp., Brooklyn, item 2a, 4.7 cents. June 6, inv. 12360.

— ★ —

Low Insecticide Bids

Chemical Compounding Corp. Brooklyn, N. Y., and California Spray-Chemical Corp., Richmond, Calif., both submitted low bids on insecticide in a recent opening for miscellaneous supplies by the Armed Services Medical Procurement Agency, Brooklyn. Chemical Compounding bid $3.947 on item one, and California Spray-Chemical Corp. bid $5.49, fob, $5.415 on item two. June 10, inv. 563.

— ★ —

Low FSS Soap Bids

Fitzpatrick Bros., Inc., Chicago, and Baird & McGuire, Inc., Holbrook, Mass., both submitted low bids on soap in a recent opening for miscellaneous supplies by the Federal Supply Service, Atlanta. Fitzpatrick bid 8.35 cents, item one, and Baird & McGuire bid 52 cents, item two. June 6 inv. 27269.

— ★ —

Low FSS Soap Bids

In a recent opening for miscellaneous supplies by the Federal Supply Service, Washington, D. C., the following low bids on soap were submitted: Colgate - Palmolive Co., Jersey City, N. J., item 1, 8.29 cents; Harley Soap Co., Philadelphia, item 2, 7.75 cents; Old Dominion Paper Co., Norfolk, Va., item 3, 3.98 cents; Wilson Co., Camden, N. J., item 4, 10.08 cents. June 14, inv. 62160.

— ★ —

Low Trio Chem. Bid

Trio Chemical Works, Inc., Brooklyn, N. Y., submitted the low bid of 85 cents, total $4,250 on 5,000 gallons of moth proofing compound, in a recent opening for miscellaneous supplies by the Quartermaster, Philadelphia. June 23, inv. 846.

— ★ —

Low Laundry Soap Bids

In a recent opening for miscellaneous supplies by the General Stores Supply Office, Philadelphia, the following low bids on laundry soap were submitted: Fitzpatrick Brothers, Inc., Chicago, item la, 6.49 cents; Colgate-Palmolive Co., Jersey City, N. J., item lb, 5.117 cents; John T. Stanley Co., New York, items 2a and 2b, 13 cents. June 15, inv. 1-1318.

— ★ —

Chicago Beauty Show

The 1955 Chicago Beauty and Fragrance Show was held at the Palmer House in that city Aug. 28 through Sept. 2, its sponsors, the Chicago Associated Toiletries Salesmen, has announced. Some 150 manufacturers of soaps, perfumes and toilet accessories have reserved space for the affair on the hotel's 8th and 9th floors.

— ★ —

Crawford to CSC

J. Clifford Crawford has joined the market development department of Commercial Solvents Corp., New York, it was announced recently by Frank E. Dolian, manager of the department.

In his new position Mr. Crawford supervises market development activities on automotive products, which include anti-freeze and specialty chemicals for automotive use. He makes his headquarters at CSC's general offices in New York City. Prior to joining Commercial Solvents he served for seven years as a chemist with USI Division of National Distillers Products Corp., New York.

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NEW Trade Marks

THE following trade marks were published in recent issues of the *Official Gazette* of the U. S. Patent Office in compliance with section 12(a) of the Trade Mark Act of 1946. Notice of opposition under section 13 may be filed within 30 days of publication in the *Gazette*. See rules 20.1 to 20.5. As provided by section 31 of the Act, a fee of $25 must accompany notice of opposition.

Stanley — This for silver and metal polish and window cleaner and polish. Filed Aug. 30, 1954 by Stanley Home Products, Inc., Westfield, Mass. Claims use since April 1936 on window cleaner and polish.

GG — This for cleaning and polishing preparation for appliances. Filed Sept. 17, 1954 by James Reichenback, doing business as Porta-Pot Co., Port Arthur, Tex. Claims use since May 3, 1954.

Chlorobenzilate—This for acaricides and miticides. Filed June 26, 1953 by Geigy Chemical Corp., New York. Claims use since Apr. 17, 1953.

Tick-em — This for insecticidal spray. Filed June 30, 1954 by Veterinary Specialty Co., Miami, Fla. Claims use since on or about May 1, 1953.

Gy-Trete — This for fungicides. Filed July 26, 1954 by Geigy Chemical Corp., New York. Claims use since Mar. 25, 1953.

LO-V — This for herbicides. Filed July 28, 1954 by Geigy Chemical Corp., New York. Claims use since June 12, 1951.

Quick way—This for pesticides, rodenticides, and insecticides. Filed Nov. 1, 1954 by Quick Chemical Corp., Chicago. Claims use since Aug. 25, 1952.

Gulf — This for insecticides. Filed Nov. 19, 1954 by Gulf Oil Corp., Pittsburgh. Claims use since on or about July 1925.

Puf — This for rinse used as a textile softener. Filed Nov. 22, 1954 by A. E. Staley Mfg. Co., Decatur, Ill. Claims use since Nov. 17, 1954.

Speed-Wash — This for car washing powder. Filed Feb. 19, 1953 by Economics Laboratory, Inc., St. Paul, Minn. Claims use since Aug. 15, 1952.

Emulsoprep — This for metal cleaners for use in the metal fabricating industry. Filed Feb. 24, 1953 by Neilson Chemical Co., Detroit. Claims use since Jan. 1, 1950.

auto-guard — This for cleaners for automobile finishes. Filed Feb. 2, 1954 by Studebaker - Packard Corp., Detroit. Claims use since on or about Oct. 15, 1953.

Fantastic — This for household cleaner concentrate for wood, textiles, upholstery and other surfaces. Filed Feb. 24, 1954 by Globe Products of Florida, Inc., Clearwater, Fla. Claims use since Jan. 12, 1954.

Staticontrol — This for cleaning compound and static preventive for printing presses, chromium and glass. Filed June 2, 1954 by William A. Frangos, Bellerose, N. Y. Claims use since Nov. 15, 1952.

white wave — This for detergent in powdered form for general household use. Filed July 9, 1954 by Milner Products Co., Jackson, Miss. Claims use since Nov. 20, 1935.

Opti-Kleen — This for treated silicose cloth for cleaning glass — namely, eyeglass lenses and other lenses. Filed Nov. 17, 1954 by Silicone Polish Corp., Brooklyn, N. Y. Claims use since Nov., 1953.

Selig — This for disinfectants, germicides, insecticides, moth repellents, and deodorants (wick - type, fluids, and block form). Filed Aug. 17, 1954 by Selig Co., Atlanta, Ga. Claims use since Sept. 15, 1924.

Super-Bomb — This for aerosol insecticides. Filed Oct. 7, 1954 by Virginia Smelting Co., West Norfolk, Va. Claims use since Sept. 1, 1954.

Krisp — This for air refresher. Filed Nov. 12, 1954 by Bostwick Laboratories, Inc., doing business as Spray Maid Products Co., Bridgeport, Conn. Claims use since Sept., 1950.

Trak — This for insecticide. Filed Nov. 19, 1954 by Gulf Oil Corp., Pittsburgh. Claims use since on or about Oct. 12, 1945.

CX — This for disinfectants, germicides, and sterilizers, generally used in solid form, for disinfecting receptacles and containers. Filed Nov. 30, 1954 by Diversey Corp., Chicago. Claims use since Apr. 22, 1953.

Lilly's — This for insecticides. Filed Dec. 17, 1954 by F. C. Sturtevant Co., Hartford, Conn. Claims use since in or about April 1938.

Captophos, Thimet, Dicapthon— These for insecticides, acaricides, ovacides, fungicides, and rodenticides. Filed Feb. 1, 1955 by American Cyanamid Co., New York. Claims use since Jan. 10, 1955 on all three.

Old Empire — This for shaving creams. Filed June 2, 1954 by Old Empire, Inc., Newark, N. J. Claims use since Sept. 9, 1939.

Klenzine — This for dry cleaning fluid. Filed July 13, 1949 by Richfield Oil Corp., Los Angeles. Claims use since Oct. 31, 1931.

Instant Wipe — This for household cleaning preparation in cream or paste form. Filed Aug. 4, 1953 by Lewal Industries, Inc., New York. Claims use since Apr. 23, 1953.

Pen-Gleam — This for mild alkaline detergent composition for cleaning of painted and other surfaces, such as glass and metal, etc. Filed Mar. 19, 1954 by Pennsylvania Salt Mfg. Co., Philadelphia. Claims use since Jan. 5, 1954.

Dandy Double Action—This for detergent hand cleaner for removing ink, etc. Filed Aug. 19, 1953 by Krayer Mfg. Co., Elizabeth, N. J. Claims use since Sept. 1, 1949.

Am-O — This for detergent or cleaning ammonia powder. Filed June 23, 1954 by B. T. Babbitt, Inc., New York. Claims use since June 8, 1954.

Handy Dan — This for paint remover, hand cleaner, and brush cleaner. Filed July 22, 1954 by Reardon Co., St. Louis. Claims use since Sept. 15, 1953, on hand cleaner.

Sen-Trol — This for dish washing solution. Filed Aug. 2, 1954 by Russell Chemical Co., Cleveland. Claims use since Apr. 20, 1954.

Tyta-Mul — This for kerosene base emulsion product used in liquid form for removing grease from mechanical parts. Filed Aug. 30, 1954 by Finger Lakes Chemical Co., Etna, N. Y. Claims use since May 25, 1954.

Protex — This for deodorant soap. Filed Oct. 26, 1954 by Manhattan Soap Co., New York. Claims use since Sept. 22, 1954.

Wool-Do — This for soap. Filed Oct. 26, 1954 by Wool-Do Co., San Francisco. Claims use since Sept. 1, 1954.

Trinse — This for detergent for personal use. Filed Oct. 29, 1954 by Trina, Inc., Providence, R. I. Claims use since June 30, 1954.

Ultra Chemical Works — This for a preparation for cleaning floors before waxing, and for removing old wax and grease from floors. Filed Nov. 10, 1954 by Ultra Chemical Works, Inc., Paterson, N. J. Claims use since Sept. 17, 1954.

Hi-Time — This for cleansing and detergent compound for use in dishwashing and other washing and cleansing operations. Filed Nov. 29, 1954 by Calgon, Inc., Pittsburgh. Claims use since Aug. 17, 1954.

The House of Frank and Joseph — This for shampoos. Filed Jan. 14, 1953 by Frank & Joseph, Los Angeles. Claims use since July 15, 1938.

Marcelle — This for soap and shampoo. Filed Jan. 27, 1955 by Marcelle Cosmetics, Inc., Chicago. Claims use since Mar. 10, 1937; and on Oct. 10, 1917, as to "Marcelle."

7-11, Grin — These for automobile polishes. Filed Dec. 30, 1954 by Grin Chemical Corp., Pasadena, Calif. Claims use since Dec. 7, 1954 and Dec. 30, 1922, respectively.

air male—This for liquid shampoo. Filed Jan. 17, 1955 by Skycharm Cosmetic Co., Kansas City, Mo. Claims use since Dec. 9, 1954.

Tilo — This for cleaner for ceramic tile, brickwork, flagstone, and porcelain. Filed Apr. 13, 1954 by John S. Badzik, doing business as Bahico Laboratories, Glendale, Cailf. Claims use since on or about July 19, 1951.

Sinnova — This for detergents for industrial use. Filed Apr. 21, 1954 by American Alcolac Corp., Fairfield, Baltimore, Md. Claims use since Jan. 20, 1954.

Bol Tabs — This for toilet bowl cleaning agents in tablet form. Filed May 26, 1954 by James W. Langman, Cleveland. Claims use since May 19, 1954.

Clue — This for detergent for household and other uses. Filed Nov. 1, 1954 by Stanalchem, Inc., New York. Claims use since Aug. 12, 1954.

Dolier — This for toilet soap. Filed Nov. 30, 1954 by Dolier Corp., New York. Claims use since Nov. 5, 1954.

Lien — This for liquid cleaner, powdered hand soap, etc. Filed Oct. 5, 1954 by Lien Chemical Co., Franklin Park, Ill. Claims use since May 4, 1954.

Director of Research Fred A. Levin, of The Nestle-LeMur Company, was quick to recognize the unusual benefits of the Pluronics to the cosmetic industry.

"Pluronics definitely have an important place in the cosmetic field"

— The Nestle-LeMur Company, New York, N.Y.

In the manufacture of hair preparations, cosmetics, perfumes, guesswork won't do. You have to be *sure* if you want to protect your good name, and build sales through satisfied users.

The Nestle-LeMur Company knows this through years of experience as makers and distributors of quality cosmetics and hair preparations. In the words of Research Director Fred A. Levin: "We are always receptive to chemical raw materials which will enable us to improve our end products. As soon as the PLURONICS* were announced, we recognized in them a balance of properties which was not available in other nonionic surfactants.

"Consequently, we asked for numerous samples in the PLURONICS series — and thoroughly evaluated those which appeared to have desirable characteristics for our products.

"The low toxicity of all the PLURONICS has been particularly appealing to us. For, in cosmetics, they can be safely applied to the skin. We've found the PLURONICS very effective in our Nestle-Lite bleach. And, for our needs, they are far superior in this preparation than any of the many nonionics previously tried.

"We also use PLURONICS in some of our other well-known products. For example, in our Nestle Color Hair Dye, they serve as an exceptional wetting agent and detergent. It's our policy to continue experiments with the PLURONICS, because no other single product on the market offers their wide range of properties."

How about *your* business? PLURONICS have accounted for substantial savings in many fields: viscose rayon and cellophane, metal cleaning, home-laundry detergents, boiler descalants, mechanical dishwashing, dye leveling — to name a few. Write, giving details of your expected applications. We will supply pertinent data and proper PLURONICS samples for your evaluation. *Wyandotte Chemicals Corporation, Wyandotte, Mich. Offices in principal cities.*

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Glycols • Chlorinated Solvents • Synthetic Detergents
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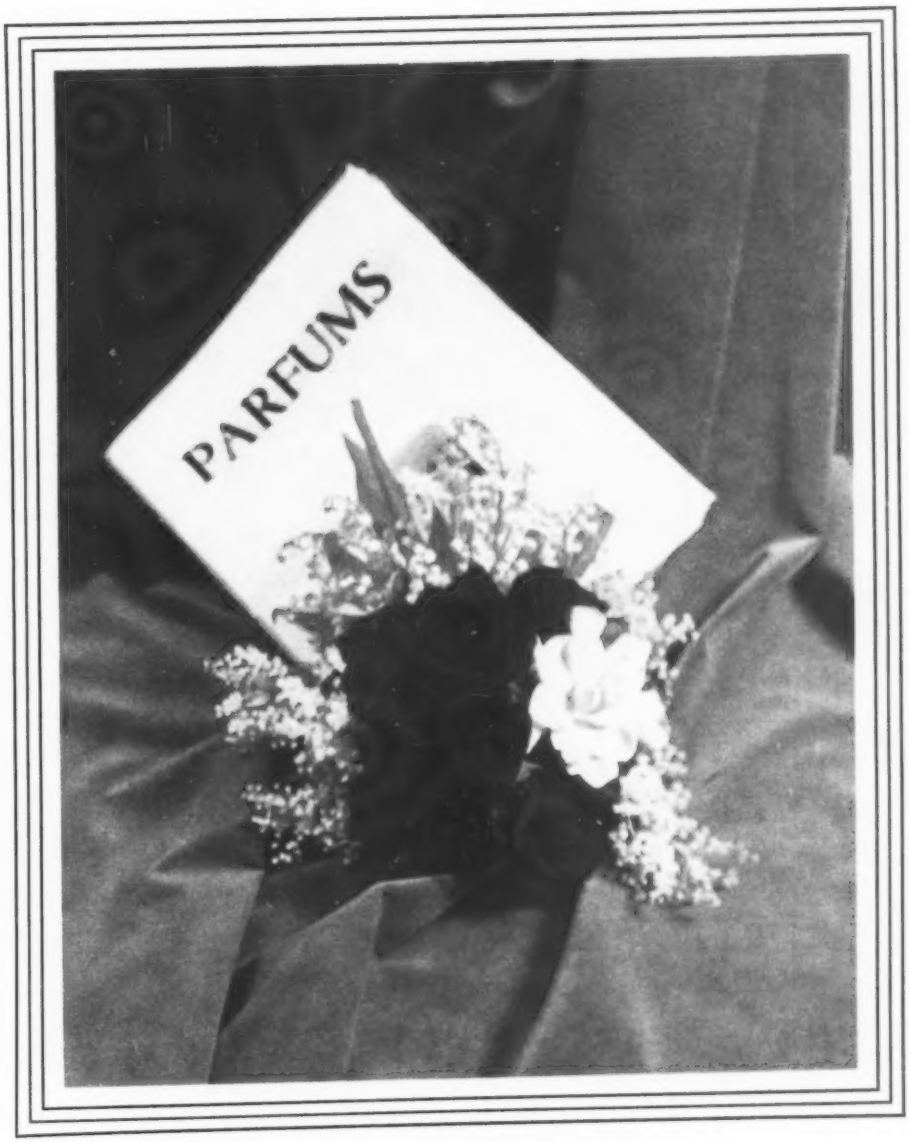

Roure-Dupont, Inc.

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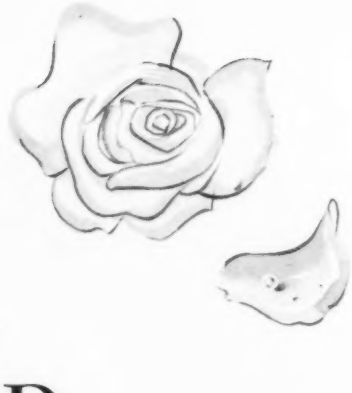
Rose



Due to the uncertainties of obtaining Bulgarian Rose of consistent quality and its resultant high costs, and the present high price of Rose de Mai, our international laboratories have devoted endless time and diligence in developing Rose Specialties that have enhanced our reputation for great technical achievement.

We are proud to recommend these products. Their exceptional quality and value is attested by the success attained by our clientele.

ROSE V *A very faithful and rich interpretation of the depth of the Bulgarian Rose. Of vital interest to perfumers seeking this note in perfume creations that cannot afford the natural. Can also be advantageously employed as an extender or substitute. $37.50 per lb.*

ROSE M *Captures all the delicacy and natural freshness of the Rose de Mai of Grasse—heady, warm and recommended for its real floral character. $25.50 per lb.*

HYDRO ROSE *One of our notable creations. An inexpensive Rose with the delightful character of the very heart of the flower. Has wide usage for colognes and all related cosmetics. $3.75 per lb.*

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News

Ultra Advances Young

Appointment of Richard M. Young, Jr., to the position of assistant sales manager was announced

Richard M. Young, Jr.

last month by Ultra Chemical Works, Inc., Paterson, N. J. In his new post Mr. Young is responsible for the sales activities of the firm's field representatives. He operates out of Ultra's Paterson office. He joined the firm in 1952 as a sales representative for the New York metropolitan area.

—— ★ ——

Soap's Demise Seen

Hard and powdered soaps may eventually disappear from the American home—to be replaced by liquid detergents, according to a recent prediction made by William C. Stolk, president of American Can Co., New York. Mr. Stolk based his prediction on the fact that the production rate of cans for liquid detergents, made by his company, by the end of this year will be five times as great as it was a year ago. Such cans introduced in 1953 are produced by his company and others. With more than half a dozen standard liquid detergents now being distributed in metal cans, his company predicts that the "canning" of heavy duty detergents for use in home and commercial washing machines will be the next step.

The rapid growth in popularity of cans for liquid detergents —one of Canco's fastest growing lines—has resulted in expansion of manufacturing facilities in the company's eastern and mid-western plants.

Elimination of the breakage risks, lower shipping costs and the perfection of his company's side seam, which makes possible around-the-can lithography, were cited as reasons by Mr. Stolk for the swing to packaging liquid detergents in cans.

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Acquires El Dorado

El Dorado Oil Works, San Francisco, established in 1892, became a subsidiary of Foremost Dairies, Inc., last month. It will be known as Foremost Food and Chemical Co., El Dorado Division, it was announced by Arthur P. Berry, president.

—— ★ ——

Colgate Advances Bricker

Appointment of John L. Bricker as director of merchandising for the toilet article department was announced last month by Colgate-Palmolive Co., Jersey City, N. J. Prior to joining Colgate in 1949, Mr. Bricker was associated with E. J. Brach & Sons, Chicago, and Young & Rubicam, New York advertising firm.

John L. Bricker

Ziegler to Cowles

Appointment of Nicholas J. Ziegler to represent Cowles Chemical Co., Cleveland, in the Detroit-

Nicholas J. Zeigler

Cleveland-Pittsburgh area, was announced recently. He will handle sales of "Drymet" and other Cowles detergent silicates marketed by the firm's heavy chemical department. Mr. Ziegler will work with Cowles heavy chemicals distributors in the area: Eaton Chemical & Dyestuff Corp., Detroit; McKesson & Robbins, Inc., Cleveland; and Campbell Chemical Co., Pittsburgh. He succeeds Elmer A. Lord, who has been transferred to Cowles' metal cleaner department.

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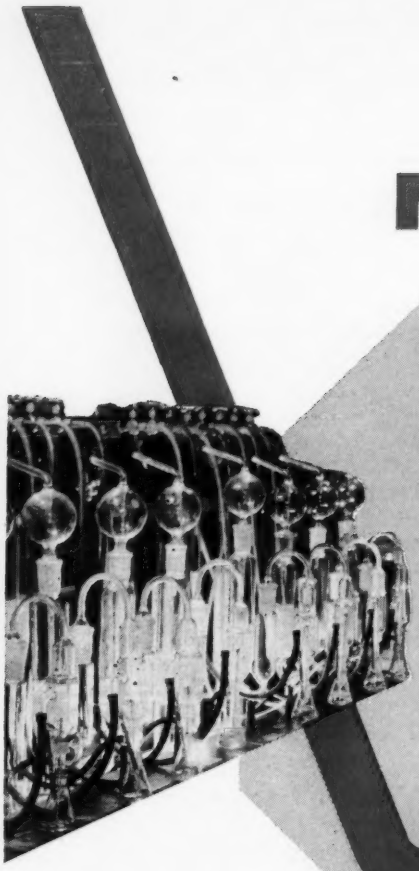
Soap, Detergent Sales Off

Tonnage sales of soaps and synthetic detergents in the second quarter of 1955 declined slightly from the totals for the first three months of this year, according to figures released recently by the Association of American Soap & Glycerine Producers, Inc., New York. The figures, based on comparative totals supplied by AASGP members showed a gain for synthetic detergents over the second quarter of 1954. Soap sales totals for the second quarter of 1955 were only slightly (less than a million pounds) under those of the comparable 1954 period.



NOW...turn to 150% ACTIVITY with SUPER-AMIDES

An amazing new group of Onyxol alkanolamides, the SUPER-AMIDES open up brand new possibilities for manufacturers who depend on this type of surfactant. These Onyx SUPER-AMIDES have an activity approaching the theoretical maximum of 150% (measured against products previously labeled 100% active).

The process newly perfected for the production of the SUPER-AMIDES with alkanolamide contents of 90% or more will insure new values in wetting, dispersing, foaming, thickening and stabilizing properties.

Be sure to take advantage of this first advance in fatty acid diethanolamine condensates in more than 25 years — your own production will reflect the new standards made possible by the use of SUPER-AMIDES.

Write, wire or phone for full data and a sample kit today.

3 SPECTACULAR SURFACTANTS

for lightest color

SUPER-AMIDE GR

for highest purity

SUPER-AMIDE L9

for maximum economy

SUPER-AMIDE GC

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Total tonnage sales of synthetic detergents for the second quarter of this year amounted to 544,746,000 pounds, valued at $127,251,000, as against 552,841,000 pounds, worth $127,144,000 in the first quarter of this year, and 454,137,000 pounds, valued at $104,475,000 for the second three months of 1954, when one less company reported.

Total other than liquid soap sales in the second quarter of this year amounted to 300,961,000 pounds, valued at $72,130,000, which is down from 316,397,000 pounds, having an at plant worth of $75,238,000 in the first quarter of 1955, and 301,831,000 pounds, worth $68,902,000 in the second quarter of 1954.

Liquid soap sales for the second three months of this year were 959,000 gallons, valued at $1,761,000, as against 740,000 gallons, worth $1,163,000 in the first '55 quarter, and 817,000 gallons, valued at $1,459,000 in the second quarter of 1954.

— ★ —

Rene Forster Moves

Rene Forster Co., New York essential oils and aromatic chemicals firm, recently moved to new offices at 432 Fourth Ave., New York 16.

— ★ —

P & G Record Sales

Record net sales of $965,797,159 for the fiscal year ended June 30 were reported by Procter & Gamble Co., Cincinnati. Sales in the previous fiscal year totaled $911,050,045. Consolidated net earnings in the past year amounted to $57,471,371 equal to $5.95 a share compared with $52,328,022 or $5.42 in the preceding year. Provision for taxes increased from $62,403,646 to $67,088,197. The balance sheet as of June 30, 1955, showed current assets of $244,490,143 and current liabilities of $79,732,627 compared with $230,806,519 and $82,904,124 a year ago.

Record sales were attributed to increased acceptance of established and new products, and to growing overseas operations.

Munro a Solvay V. P.

Appointment of I. H. Munro as vice-president of Solvay Process Division of Allied Chemical & Dye

I. H. Munro

Corp., New York, was announced recently by Carlton Bates, president. Mr. Munro joined Solvay's engineering department at Syracuse, N. Y., in 1935, became assistant chief engineer in 1945 and six years later assumed the duties of chief engineer. In 1953 he was transferred to the New York office and appointed assistant to the executive vice-president. In his new post Mr. Munro continues to be located at the firm's executive offices in New York.

— ★ —

"Surfynol" Bulletin

A new technical bulletin was published recently by Air Reduction Chemical Co., New York, on its line of "Surfynol" surface active agents. These ditertiary acetylenic glycols are non-foaming nonionics. In combination with other surfactants they improve wetting properties, may act as foam suppressers or foam boosters and stabilizers. "Surfynols" may be used in emulsifying formulations for dry cleaning solvents, as components of radiator cleaners and descaling compounds, and as components of rinsing agents.

New C-P Louisville Office

A new, completely air-conditioned office building was opened last month by Colgate-Palmolive Co., Jersey City, N. J., at Louisville, Ky. The two story structure has approximately 25,000 square feet of working area on each floor, houses more than 300 clerical workers. It will serve as a billing and order-handling center for Colgate operations in 11 southern and middle-western states. In addition a variety of clerical and accounting functions for the firm's Jeffersonville, Ind., plant will be performed in the new building. The plant is located across the Ohio river from Louisville. Colgate bought a lot across the street from the new building which has been converted into parking facilities for 100 cars.

Opening ceremonies were attended by Marshall S. Lachner, vice-president in charge of soap sales, and Hugh Jewett, comptroller and secretary. The opening was a high point in Louisville's "Colgate Week," which also featured an essay writing contest for housewives and a dealer display contest.

New office building of Colgate-Palmolive Co., in Louisville.

A New Milestone of Modern Perfume Research

AMBROPUR

»DRAGOCO«

(REGISTERED)

embodies the 100% fragrance principle of highest-quality genuine ambergris in its purest form. That's why it possesses the true ambergris odour – full, warm, and velvety – that perfects perfume, enhancing and fixing it without changing the character of a composition.

Please ask four our Special DRAGOCO-REPORT on AMBROPUR DRAGOCO.

DRAGOCO HOLZMINDEN

DRAGOCO HOLZMINDEN, WEST GERMANY Telex. 096326 Cables: DRAGOCO HOLZMINDEN (West Germany)

Lever Develops Coupon Sorter

A NEW labor saving system for the handling of coupons has been developed by Lever Brothers Co., New York, and is now available to dealers, it was announced recently. Key feature of the method is "Sort-A-Coup," a plastic tray measuring three by seven by 12 inches.

The "Sort-A-Coup" is divided into three compartments; one for 5 cent coupons, one for 10 cent coupons and a general compartment for all other denominations. Coupons are simply sorted by value into one of these three compartments at the time of receipt. The second step is to sort the coupons in each compartment by offer. For example, take all the 5 cent coupons and sort them by color and design. This automatically separates them into groups by offer.

The third and final step is to count the coupons and stack them, by value, in each of the three compartments. For example, place each group of 5 cent coupons one on top of another and continue until they are all in one stack. Count them, and write the total on the top coupon. Place rubber bands around the entire stack and replace in the 5 cent compartment. When the coupons are thus sorted, they are ready to be forwarded or redeemed by the manufacturers' salesmen.

With the tray Lever supplies a booklet of instructions, including directions for the use of the "Sort-A-Coup" together with billing procedures recommended by the Grocery Manufacturers Association for independent retailers and report forms and simplified invoices for multi-unit stores. Also included is a description and specifications for the collating table for use by headquarters or warehouse as suggested in the recently published GMA report. This report utilizes the results of Lever's own studies which resulted in the "Sort-A-Coup" system along with the findings of the association's research into coupon handling in stores and at multiple unit headquarters. The report forms are said to save up to 80 percent of the paperwork formerly required for this operation in stores. The GMA-recommended collating table is estimated to reduce overhead cost by about 20 percent and the invoice form for multi-unit stores cuts billing time by more than 50 percent.

The "Sort-A-Coup" system eliminates the need for a large sorting area. The tray itself is a convenient and compact container for storing coupons in the safe just like cash receipts.

—★—

New Avon Plant

Avon Products, Inc., New York, has started construction of a plant to cost $3,000,000 in Morton Grove, a Chicago suburb, it was announced recently. When completed, the building, one and two stories high, and containing 350,000 square feet of floor space, will house Avon's midwest administration and sales offices, now in the Merchandise Mart, Chicago, together with manufacturing facilities to serve the company's growing midwest markets. Warehousing and distribution operations, now handled in the North Pier Terminal at the mouth of the Chicago river, will also be transferred to Morton Grove, it was announced.

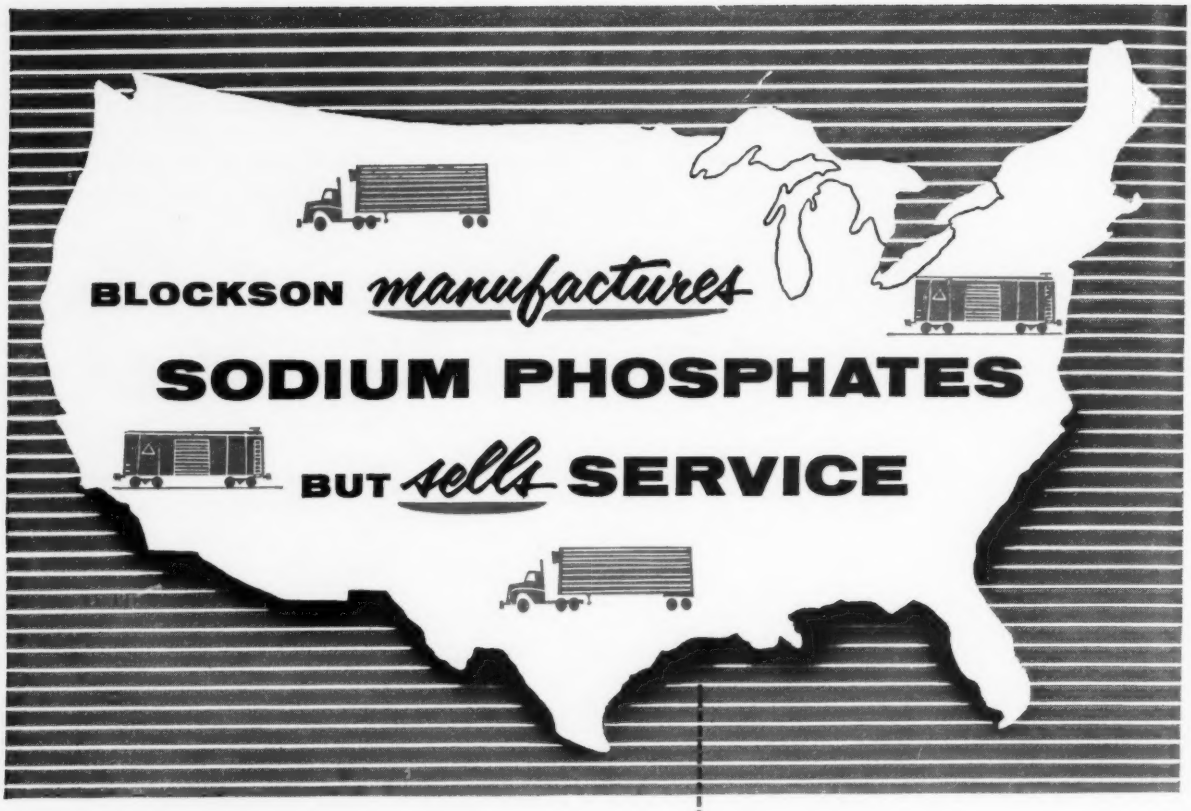
The 69-year-old Avon firm is headquartered in New York and manufactures some 170 cosmetic and toilet preparations in plants at Middletown, N. Y., Pasadena, Calif., and Montreal, Quebec. Distribution is through a direct-to-home system. Sales for the last fiscal year were reported in excess of $57 millions.

—★—

Solvay Names Erchak

Appointment of Michael J. Erchak as technical director of Semet-Solvay Petrochemical Division, Allied Chemical & Dye Corp., New York, was announced last month. Dr. Erchak initiated the development of the Allied Chemical process for producing polyethylene, when he served at the central research laboratory in Morristown, N. J. In his new assignment he is concerned with pilot plant operations including control, product research and development, and technical service programs for polyethylene products.

The "Sort-A-Coup" of Lever Brothers Co. is a small, handy three-compartment plastic tray measuring 3" x 7" x 12". Participating distributors who tested the "Sort-A-Coup" system in nearly 1,000 stores reported saving more than 50 per cent of the time required in the stores to sort, count and report coupons.



THERE is a reason for the very substantial tonnage of sodium phosphates Blockson ships to industrial areas far from our greatly expanded plant facilities here in Joliet. That reason is continuous prompt shipment—a few bags or many carloads—minus the red tape usually associated with an operation as large as ours.

Again and again customers tell us they couldn't get better service if our plant were located in their own industrial community.

There is a reason for that, too. At Blockson, production and sales are so closely coordinated that a single collect phone call is all that is required to expedite your unforeseen needs and get your sodium phosphates en route the very same day if it is humanly possible, and most frequently it is.

We welcome the responsibility of functioning as an arm of our customers' production setup, minimizing their inventory and warehousing expense, timing and dovetailing dependable shipments with their own processing operations and at all times providing a uniform and dependable competitively priced product—readily available in your required granulations and specifications.

The new Blockson catalog and handbook is yours for the asking.

BLOCKSON CHEMICAL COMPANY

Division of Olin Mathieson Chemical Corporation

Joliet, Illinois

- *Sodium Tripolyphosphate*
- *Trisodium Phosphate*
  CRYSTALLINE • MONOHYDRATE
- *Tetrasodium Pyrophosphate*
  ANHYDROUS
- *Sodium Polyphos*
  (SODIUM HEXAMETAPHOSPHATE)
  (SODIUM TETRAPHOSPHATE)
- *Sodium Acid Pyrophosphate*
- *Trisodium Phosphate Chlorinated*
- *Disodium Phosphate*
  ANHYDROUS • CRYSTALLINE
- *Monosodium Phosphate*
  ANHYDROUS • MONOHYDRATE

- *Sulfuric Acid*
- *Sodium Fluoride*
- *Sodium Silicofluoride*
- *Hygrade Fertilizer*
- *Teox® 120*
  NONIONIC SURFACTANT

BLOCKSON

Panel at press conference held Aug. 23 at Hotel Roosevelt, New York, to announce publication of "Prevention of Occupational Skin Diseases" by Dr. Louis Schwartz. Left to right, Dr. A. J. Fleming, medical director, E. I. du Pont de Nemours & Co., Wilmington, Del.; Dr. Donald J. Birmingham, Division of Special Health Services, Occupational Health Field Headquarters, U. S. Public Health Service, Cincinnati; Dr. Schwartz, Roy W. Peet, manager, AASGP, who presided; Edward Randa, Armour & Co., Chicago,, chairman of technical committee assisting Dr. Schwartz; Dr. W. J. McConnell, Health Bureau, Metropolitan Life Insurance Co., New York, and Dr. E. Kern Linder, medical director, Atlantic Refining Co., Philadelphia.

AASGP Booklet on Dermatitis

PUBLICATION of a 50-page illustrated booklet, "The Prevention of Occupational Skin Diseases," written by Dr. Louis Schwartz, industrial dermatologist and former Medical Director of the U. S. Public Health Service, was announced late last month by the Association of American Soap & Glycerine Producers, New York. Preparation of the booklet, the cost of which has been underwritten by the 152 member companies of the Soap Association, which is distributing the work, is part of the Association's Cleanliness Bureau's program of information on uses of soaps and detergents.

Assisting Dr. Schwartz were the following members of a technical committee composed of representatives of member companies of AASGP: Edward Randa, Armour & Co., Chicago, chairman; Dr. P. G. Bartlett, West Disinfecting Co., Long Island City, N. Y.; H. G. Goldenberg, Huntington Laboratories, Inc., Huntington, Ind.; G. H. Packwood, Jr., G. H. Packwood Mfg. Co., St. Louis; L. E. Lee, Sugar Beet Products Co., Saginaw, Mich., and J. D. Moore, Pacific Coast Borax Co., Los Angeles.

Individual, free sample copies are available from the Soap Association, 295 Madison Ave., New York 17, N. Y. Other copies are being distributed by members of AASGP. Later this fall, bulk quantities will be supplied at cost and will be available through members.

The new booklet emphasizes the role of cleanliness of both person and environment in combating dermatitis and other occupational skin diseases. It shows the major causes of occupational dermatitis. These are listed under five main headings: mechanical (friction, pressure, injury); physical (heat, cold, radiation); plant poisons (several hundred woods and plants); biological (bacteria, fungi, mites, etc.); chemical agents (primary irritants such as strong acids or other corrosives, and sensitizers such as TNT, resins that do not cause dermatitis, but pave the way on further contact).

A brief study of the anatomy and physiology of the skin is also included.

Ways of preventing dermatoses are outlined and an effective program of personal hygiene which provides for the quick removal from the skin of any irritants unavoidably contacted in work is given.

Dr. Schwartz examines anti-

(*Turn to Page* 130)

Members of technical committee with Mr. Peet and Dr. Schwartz who attended press conference, l. to r.: front row, Edward Randa, Armour, chairman, Dr. Schwartz and J. H. Packwood, Jr., Packwood Mfg. Co., St. Louis. Rear row: Roy Peet, J. L. Jones, representing L. E Lee of Sugar Beet Products Co, Saginaw, Mich., and J. C. Moore, Pacific Coast Borax Co., New York. Unable to attend press conference were P. G. Bartlett, West Disinfecting Co., Long Island City, N. Y. and H. G. Goldenberg, Huntington Laboratories, Inc., Huntington, Ind.

When

synthetic detergents

do this . . . . . .

it's time to add PQ Sodium Silicates

Now, control of the corrosiveness of most synthetic detergents and builders on metals can be certain. The unique properties of soluble silica in PQ Silicates give sales appeal to cleaners and detergents sold for automatic washers for dishes and laundry.

You'll be interested in our detailed studies of the corrosive action of household detergent mixtures. These prove that on copper, brass and zinc, silicate builders reduce corrosion.

Working on a new detergent formula, or changing an old one? Use PQ Silicate, liquid in spray-dried detergents; powder for dry mixtures.

We invite your request for literature, samples and prices.

PQ Soluble Silicates

METSO DETERGENTS

PHILADELPHIA QUARTZ COMPANY
1152 Public Ledger Building
Philadelphia 6, Pa.

Zinc shaft from popular washing machine corroded by detergent

WORKS: *Anderson, Ind., Baltimore, Md., Chester, Pa., Gardenville, N. Y., Jeffersonville, Ind., Kansas City, Kans., Rahway, N. J., St. Louis, Mo., Utica, Ill.*

Emery Research Center

Completion of the new Twitchell Memorial Laboratories was announced recently by Emery Industries, Inc., Cincinnati. Dedicated to Ernest Twitchell, Emery's first research chemist, and built at a cost of over $800,000, the new three story, L-shaped building provides 30,000 square feet of floor space for 28 individual laboratories. It houses the new chemical, the fatty acid and esters, and the textile laboratories of the research department as well as the chemical engineering department and the development and service laboratories. All are air-conditioned.

Twenty-eight individual laboratories, with the most modern of equipment, are in the new Twitchell Memorial Laboratories built by Emery Industries, Inc., Cincinnati. The modern design building has just been completed.

These facilities and the special application laboratories on the ground floor of the building are equipped for basic research on products and plant processes and for evaluation of the firm's fatty acids and other products in practical applications such as soaps, detergents, and other specialties. A special laboratory and small scale dry cleaning plant are designed for work connected with the firm's "Sanitone" service, licensed to dry cleaners. The new research center also includes a library, and the executive offices and a conference room are located in the same building.

—★—

C-P Sales Increase

Increases in its sales for the first half and the second quarter of 1955 were reported recently by Colgate-Palmolive Co., Jersey City, N. J. Domestic sales for the first six months of 1955 amounted to $137,940,000, an increase of $6,136,000 over the corresponding period of 1954. Second quarter sales of $75,456,000 increased $11,305,000 over the preceding year which reflects primarily the recovery of shipments delayed due to a strike in the latter part of March, 1955.

Net income for the first six months of 1955 amounted to $4,501,000 or $1.74 per share, including earnings of $3,403,000 or $1.34 per share in the second quarter. In the preceding year earnings were $5,549,000 or $2.20 per share for the six months period, and $2,095,000 or 82 cents per share for the second quarter. The lower net income for 1955 reflects substantial introductory costs for new products, particularly "Ad," a new controlled suds detergent.

Sales of foreign subsidiaries which are not consolidated amounted to $88,872,000 for the first six months of 1955, as compared with $80,172,000 in the first half of 1954. Foreign sales for the second quarter of $45,831,000 compare with $39,976,000 in the 1954 period. Worldwide sales in the first half of 1955 totaled $226,812,000, an increase of $14,836,000 over the first half of 1954.

—★—

Controllers Elect Harrelson

Charles A. Harrelson, secretary-treasurer of Plough, Inc., Memphis, has been elected a director of the Memphis Control of the Controllers Institute of America, it was announced last month. At the annual meeting of the group's Twin Cities Control, Ralph W. Sauber, controller, Rayette, Inc., St. Paul, was named to serve on the board.

—★—

New Sandoz Surfactant

A new surface active agent for the processing of cotton, wool, and synthetic fabrics was introduced last month by Sandoz Chemical Works, Inc., New York. Described as an ethylene oxide condensate containing groups of anionic nature, "Sandopan DTC" is claimed to combine the advantages of anionic soap and nonionic detergents while being free of their disadvantages. The product is said to have rapid wetting and penetrating properties and powerful detergent action.

—★—

Finetex to East Paterson

Finetex, Inc., formerly located at Pompton Plains, has moved to 418 Falmouth Avenue, East Paterson, N. J. Telephone number is PA 4-4686.

—★—

Honor Lever Man

Emile A. LeGros, plant engineer at the Chicago Pepsodent plant of Lever Brothers Co., New York, was recently honored by his employers with an unusual public relations citation. Mr. LeGros is a member of the Playground and Recreation Board in River Forest, Ill. where he makes his home. The award was given in recognition of his civic role in providing playground facilities and activities for the children of his community.

—★—

Gross Names Lechner

Carl A. Lechner Co., Chicago, has been named distributor in the Chicago territory for A. Gross & Co., New York, it was announced recently by Eugene W. Adams, Gross vice-president. Lechner handles the complete line of fatty acids and glycerides manufactured by the 118-year old Gross organization at Newark, N. J.

FAMOUS LIGHTHOUSES OF AMERICA

STANNARD ROCK LIGHTHOUSE, Lake Superior, Michigan, is located about 23 miles southeast of Manitou Island. Completed in 1883, the stone tower is built on a base of concrete and stone which stands on solid rock in 11 feet of water. The light, 102 feet above water and visible for 18 miles, protects shipping in a dangerous area on the heavily traveled trade route between Duluth and the lower lakes.

Protection for the quality of your products and the efficiency of your processes is provided by the uniformly high standards of Niagara Alkali Company products. Depend on the purity and uniformity of Nialk® Liquid Chlorine, Nialk Caustic Potash, Nialk Carbonate of Potash, Nialk Paradichlorobenzene, Nialk Caustic Soda, Nialk TRICHLORethylene, Niagathal® (Tetrachloro Phthalic Anhydride).

NIAGARA ALKALI COMPANY

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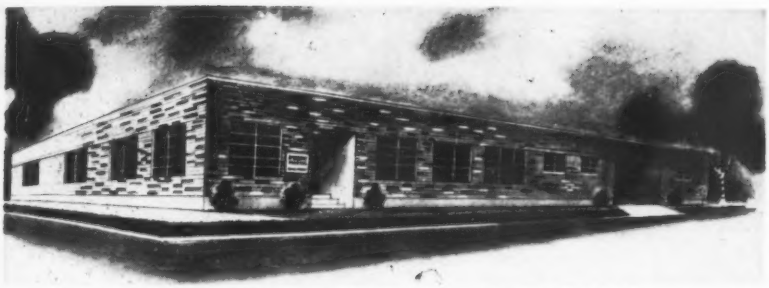


New home of Perry Brothers, Inc., in Woodside, N. Y.

Perry Bros. Move

Perry Bros., Inc., formerly of Brooklyn, has moved to larger and more modern quarters at 61-12 32nd Avenue, Woodside 77, L. I., N. Y., it was announced last month. New telephone number is RAvenswood 1-3636. The building houses office, laboratory, production and warehouse facilities.

—★—

Pattison Talk to ACS

A symposium on marketing the products of oil seeds will be held in Minneapolis on Sept. 12 under the sponsorship of the American Chemical Society. Malcolm M. Renfrew, director of research and development, Spencer Kellogg and Sons, Inc., Buffalo, N. Y., will preside, and E. Scott Pattison of the Association of American Soap & Glycerine Producers, Inc., New York, will speak on "Developing Markets for Fatty Acids."

Other papers scheduled on the program include: "Commodity Trading in Oil Seeds and their Products," by E. H. Russell, Minnesota Linseed Oil Co., Minneapolis; "Technical Representation in the Shortening Industry," by W. F. Schroeder, Humko Co., Memphis; "The Lecithin Story — With a Moral," by Joseph Eichberg, American Lecithin Co., Woodside, N. Y.; "Marketing of Vegetable Oil Seed Proteins," by H. A. Olendorf and M. W. Dippold, Spencer Kellogg and Sons, Inc., Buffalo, N. Y.; "Are the Vegetable Oil Producers Really Promoting their Products to Paint and Resin Manufacturers?," by Charles G. Moore, Glidden Co., Chicago; "How the Vegetable Oil Producers Expect to Meet the Needs of the Paint Industry," by Max Kantor, Cargill, Inc., Minneapolis; and "New Product Development Programs for Processors of Vegetable Oil Seeds," by George K. Nelson, Archer - Daniels - Midland Co., Minneapolis.

—★—

Ungerer Executives Abroad

Kenneth G. Voorhees and Ivon H. Budd, president and first vice-president, respectively, of Ungerer & Co., New York, sailed Sept. 3 for Europe in the *S.S. Liberte.*

While abroad they are to inspect facilities of the Ungerer-Vidal Charvet Paris office and visit several of the company's European sources of supply and customers. Their return is scheduled for early in October.

—★—

Solvay Names Smith, Clark

Appointments of Harold M. Smith as assistant purchasing agent and of Andrew S. Clark as construction manager of the engineering division were announced recently by Solvay Process Division, Allied Chemical & Dye Corp., New York. Both men have been with Solvay since 1946.

—★—

AMA Names Emmerling

Walter Emmerling, office manager, general office of Procter & Gamble Co., Cincinnati, recently became a member of the Office Management Planning Council of the American Management Association. He is one of four new members who joined 13 reappointed members on the council last month to serve on a voluntary basis in the planning of conferences, seminars, and research for the division.

More than 400 guests and friends from the chemical industry attended the recent 7th Annual Baseball Outing and Dinner given by the Chemical Club of New England. Shown in the photo below, taken at Boston's Fenway Park where the club's party attended the Red Sox-Cleveland game, club president M. S. Johnson of Allied Chemical & Dye Corp. and entertainment committee chairman T. Fred Baker of Fritzsche Brothers, Inc., chat with the Indians' pitching ace Bob Feller, sportscaster Bob Murphy, and Red Sox pitching coach Dave Ferriss, all of whom contributed to the Club's entertainment during the dinner program held subsequently at the Hotel Somerset. In planning the entertainment, Mr. Baker was assisted by Charles Hoyt, Jr., of Whittemore-Wright Co., and Loring Litchfield of E. I. du Pont de Nemours & Co.

To fight bacteria more effectively, give your personnel

Cleanliness that clings *with* G-11®

(Hexachlorophene)

Ordinary cleansers remove dirt but leave millions of bacteria on the skin. *G-11* soaps and detergents reduce the bacterial population. Their regular use leaves an anti-bacterial deposit that does not rinse off but stays on the skin day in and day out to provide *cleanliness that clings.*

G-11 is one of the most *effective* ways to protect your people against skin infection—the cause of much costly absenteeism—while helping to prevent contamination of the materials they handle!

Whether your responsibility is a factory, hospital, food plant, school, restaurant or commercial building, you can give your personnel cleanliness that clings and intensify your attack on skin bacteria with products containing *G-11.*

Hexachlorophene soaps and detergents are non-irritating to the skin and can be used in all types of soap dispensers without fear of corrosion. Ask your supplier for full information.

SINDAR® *Corporation*

Industrial Aromatics and Chemicals

330 West 42nd Street • New York 36, N. Y.

Branches: **Philadelphia • Boston • Cincinnati • Detroit Chicago • Atlanta • Seattle • Los Angeles • Toronto**

Fifth SAACI Sales Clinic Oct. 24th

THE fifth annual sales clinic of the Salesmen's Association of the American Chemical Industry will be held at the Roosevelt Hotel, New York, Oct. 24, in conjunction with the annual dinner of the association. General theme of the clinic will be "Effective Selling of Chemicals."

The dinner speaker will be Henry B. Hass, president of the Sugar Research Foundation, whose topic will be "What Will You Be Selling Tomorrow?" At the luncheon, an outstanding business leader, not as yet selected, will discuss "The Impact of the Chemical Industry on Today's Business."

Morning speakers, and their subjects will be as follows: Jack Klein, president of the Klein Institute for Aptitude Testing, Inc., "Were You Born to Be an Effective Chemical Salesman?"; Robert A. Gopel, manager of sales personnel department, The Koppers Co., "How an Ordinary Fellow Becomes a Salesman"; W. Edward Keegan, sales manager, Shell Chemical Corp., "The District Office—How to Run It"; and J. Warren Kinsman, vice-president of E. I. du Pont de Nemours & Co., "You, the Salesman, and Your Management."

The afternoon panel sessions will be held concurrently. Their topics and speakers will be as follows:

Panel I: "The Individual Salesman"—P. Langdon Richards, Enjay Co., chairman; Ralph L. Ericsson, executive vice-president of Sumner Chemical Co., moderator; William J. Heckman, vice-president for purchases and transportation of Olin-Mathieson Chemical Corp.; Jack L. Wilson, director of sales for Pennsylvania Industrial Chemical Corp.; and Mr. Klein.

Panel II: "Training for Chemical Salesmen—By Their Bosses and Themselves"—Neil M. Draper, Solvay Process Division of Allied Chemical & Dye Corp., chairman; Elbert W. Burr, manager of the personnel development section, Monsanto Chemical Co., moderator; J. Porter Henry, Jr., president of Porter Henry & Co.; Robert H. Kampschulte, general sales manager of Celanese Corp. of America; and Mr. Gopel.

Panel III: "Administration of the District Office"—Preston F. Tinsley, Westvaco Chemical Division, Food Machinery & Chemical Corp., chairman; Leo G. Grant, eastern district manager, Dow Chemical Co., moderator; Thomas M. Craig, Westvaco Mineral Products Division of FMC; James E. Spencer, Harshaw Chemical Co.; and Mr. Keegan.

Panel IV: "Is Selling for Distributors Different"—Herman Schulman, Washine-National-Sands, Inc., chairman; Louis P. Butenschoen, manager of solvent sales, Dow Chemical Co., moderator; Carl T. De Prima, purchasing agent for Hoffman LaRoche, Inc.; Joseph C. Abeles, vice-president Kawecki Chemical Co.; and E. W. Samson, vice-president, Central Solvents & Chemical Co.

A general discussion round-up will follow the panel sessions, at which a summary of what went on at the four panels will be given. This will be followed by a cocktail hour and the dinner.

—★—

"Lakeseal" Booklet

A new booklet entitled "Professional Cleansing of Biological Glassware" was published last month by Finger Lakes Chemical Co., Etna, N. Y. Effective cleaning methods for hand and machine washing of utensils used in biological and serological techniques, are covered. Described are also four "Lakeseal" products designed for this purpose: "Bio-Lab" and liquid "Bio-Lab" for hand washing and "Bio-Machine" and liquid "Bio-Machine" for machine wshing. Both types are free rinsing and "Bio-Machine" is also non-sudsing.

Four new "Lakeseal" products for hand and machine washing of utensils used in biological and seriological techniques

—★—

Hagelin to Dreyer

Roy W. Hagelin has joined the sales staff of P. R. Dreyer, Inc., New York, it was announced late last month. He was previously associated with Dodge & Olcott, Inc., New York, and prior to that was manager of the essential oil division, S. B. Penick Co., New York. Mr. Hagelin has covered the eastern United States for a number of years and will continue to do so.

—★—

New Monsanto Sales Posts

John A. Heenan has been appointed as eastern regional sales manager and Robert Lawrence as western regional sales manager for the merchandizing division of Monsanto Chemical Co., St. Louis, it was announced recently by Edward L. Hodge, general manager of sales for the division. In addition to these newly created positions Monsanto established a Kansas City, Mo., sales district for the division.

Mr. Heenan, previously manager of the New York district, is now responsible for overall sales activities of the New York, Boston, Philadelphia, Atlanta, and Columbus districts. His headquarters are in New York.

Robert Lawrence, who had been manager of the Columbus, O., district, is in charge of sales in the Chicago, Dallas, Los Angeles, San Francisco, and Kansas City districts, with headquarters in St. Louis.

Edward P. Heath, who has been on the New York district sales staff, succeeds Mr. Heenan as manager of that district. Tom S. Reed of Columbus, O., succeeds Mr. Lawrence as manager of the Columbus district. The newly established Kansas City district has been assigned to John B. Ferguson, Jr., who was a member of the Dallas district sales staff.

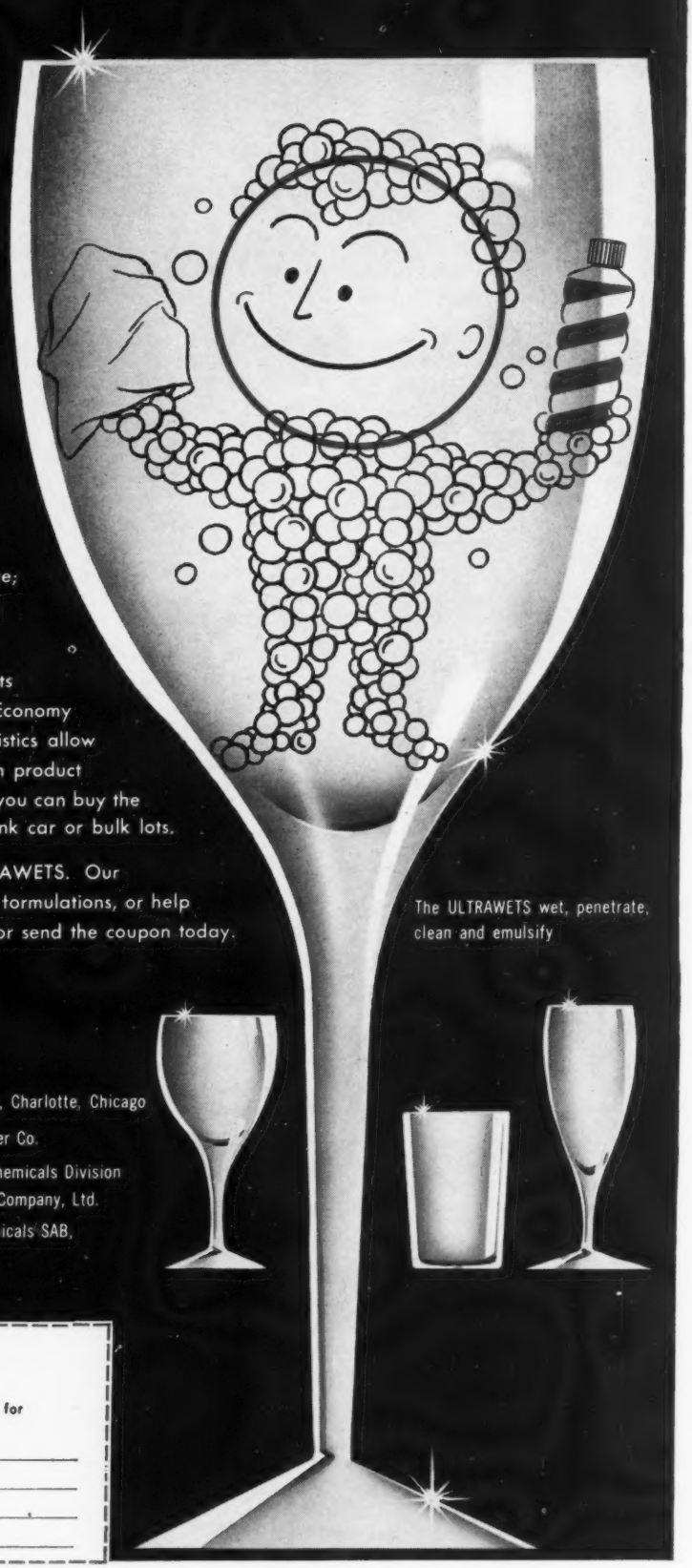
Suds, Shines and SELLS

The growing preference for liquid detergent formulations is showing up in the sales picture . . . last year there was a phenomenal industry-wide increase in these sales.

And no wonder . . . liquid detergent formulations offer real economy; instant solubility in any water; a pleasing fragrance; sneeze-free washing; dishes that dry shining bright; no sink scum to scrub away.

Many of today's best-selling liquid detergents are formulated with Atlantic ULTRAWETS. Economy is one reason. High performance characteristics allow a saving on the quantity needed to maintain product efficiency. Add to this saving a further one: you can buy the ULTRAWETS at significantly low prices in tank car or bulk lots.

Ask us for detailed information on the ULTRAWETS. Our Chemical Products Sales Division can supply formulations, or help you develop your own. Write, wire, phone or send the coupon today.



The ULTRAWETS wet, penetrate, clean and emulsify

ATLANTIC PETROLEUM CHEMICALS

Philadelphia, Providence, Charlotte, Chicago

In the West: L. H. Butcher Co.

In Canada: Naugatuck Chemicals Division of Dominion Rubber Company, Ltd.

In Europe: Atlantic Chemicals SAB, Antwerp, Belgium

THE ATLANTIC REFINING COMPANY
Dept. E-9, Chemical Products Sales
260 South Broad Street, Philadelphia 1, Pa.

Please send me information on the ULTRAWETS for liquid detergent formulations.

Name _____

Firm _____

Street _____

City _____ Zone _____ State _____

New Chlorine-Caustic Plant

Solvay Process Division, Allied Chemical & Dye Corp., New York, announced recently that it will soon begin construction of a mercury cell chlorine-caustic soda plant near Brunswick, Ga. Expected to be on stream by December 1956, the new plant will be on a 700-acre site, provide initial employment for 125 people, and have a daily capacity of 100 tons of chlorine and 125 tons of caustic soda.

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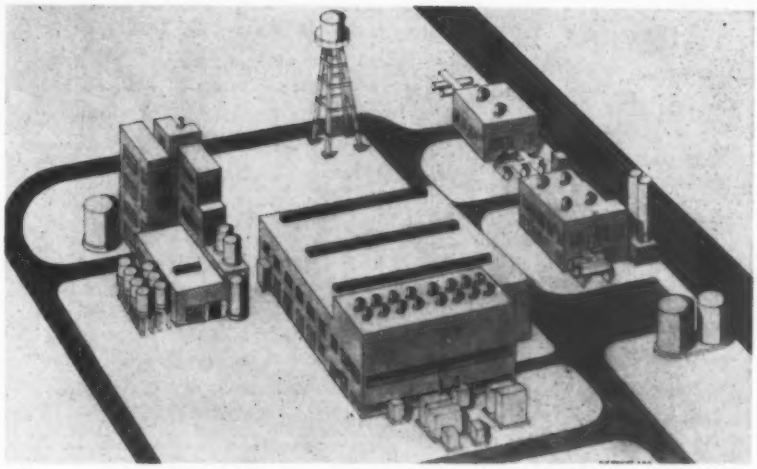
AOCS Meets Oct. 10-12

A session devoted to synthetic detergents will be among the highlights of the 29th annual fall meeting of the American Oil Chemists Society, to be held at the Bellevue-Stratford Hotel, Philadelphia, Oct. 10-12, W. C. Ault of the Eastern Regional Research Laboratory is chairman of the program committee. A total of 56 technical papers will be presented at general, concurrent, or student sessions. In addition to synthetic detergents, special topics include analytical techniques, chemical modification, shortenings, nutrition, oxidation and polymerization, as well as general research. Following the call to order on Monday morning, Oct. 10, by W. A. Peterson of Colgate-Palmolive Co., Jersey City, N. J., president of the society, the following papers on detergents will be presented:

"A Commercial Process for the Manufacture of Sucrose Esters of Fatty Acids," by Lloyd Osipow, Foster Dee Snell, W. C. York and Arthur Finchler, Foster D. Snell, Inc., New York; "The Effects of Soil Composition in Evaluation of Dishwashing Detergents," by F. J. Gozlow, V. J. Keenan and B. J. Meehan, Atlantic Refining Co., Philadelphia; "Soil Removal by Dishwashing Detergents," by L. G. Leenerts, J. F. Pietz and J. H. Elliott, Purex Corp., Ltd., South Gate, Calif.; "Synthetic Detergents from Animal Fats. VI. Polymerizable Esters of a-Sulfonated Fatty Acids," by R. G. Bistline, Jr., A. J. Stirton, J. K. Weil and W. S. Port, Eastern Regional Research Laboratory, Philadelphia; and "Preliminary Report on a Rapid Method of Evaluating Detergency by Means of an Ultrasonic Transducer," by W. C. White and J. C. Sherrill, Quartermaster Laboratory, Natick, Mass.

At the general session Monday afternoon, Oct. 10: "Countercurrent Distribution as a Tool for the Study of Glyceride Structure," by H. J. Dutton, J. A. Cannon and C. R. Scholfield, Northern Regional Research Laboratory, Peoria, Ill.; "Glycerine Syntheses. II. Syntheses Involving 1-Montrityl Glycerol," by C. G. Youngs, A. J. E. Porck and B. M. Craig, Prairie Regional Laboratory, Saskatoon, Saskatchewan, and "Purification of Ricinoleic Acid," by E. M. Meade, University of Toronto, Canada.

At the session on technology, Tuesday morning, Oct. 11: "Purification of Crude Glycerine by Ion Exchange," by Glenn Prielipp, Dow Chemical Co., Midland, Mich., and H. W. Keller, Illinois Water Treatment Co., Rockford, Illinois.



New mercury cell chlorine, caustic soda plant of Solvay in Brunswick, Ga.

—★—

Hooker Names Three

Robert T. Moore, John F. Shea, Jr., and Harry Dreifus, chemical engineers, joined Hooker Electrochemical Co., Niagara Falls, N. Y., it was announced last month. The three men have been assigned to the process study group.

—★—

New Becco H_2O_2 Units

Expansion of hydrogen peroxide production facilities at Buffalo, N. Y., and Vancouver, Wash., was announced last month by Becco Chemical Division, Food Machinery and Chemical Corp., Buffalo, N. Y. Electrolytic production capacity of hydrogen peroxide at the firm's Vancouver plant will be enlarged by about 50 percent at a cost of more than one million dollars. The facilities are expected to be on stream by early 1956. A new non-electrolytic unit went into production recently in Buffalo. The process used is said to be the result of over fifteen years' development at a cost of several million dollars.

—★—

Former D & O Head Dies

Charles A. Myers, who retired 10 years ago as president of Dodge & Olcott, Inc., New York, died July 29 at his home, 99 Glenwood Road, Englewood, N. J. He was a member of the Chemists Club of New York, Englewood Field and Knockerbocker Country Clubs, and was a former member of the board of Model Shipbuilders, New York.

—★—

Two New "Alamasks"

Rhodia, Inc., New York, introduced recently two additions to its line of industrial chemical reodorants. "Alamask P4-M" and "Alamask P4-M-X" are designed to mask objectional odors emanating from municipal waste, chemical plant operations, and pharmaceutical and biotic wastes. Both products are said to exhibit improved low temperature stability and odor coverage of sulfides and mercaptans.

—★—

McGinley Controllers Secy.

Robert J. McGinley, associate manager of accounting and finance, overseas division, Procter & Gamble Co., Cincinnati, has been elected secretary of the Cincinnati Control of the Controllers Institute of America, it was announced recently.

Sevougian in Versene Post

Appointment of S. G. Sevougian as manager of the Framingham, Mass., plant of Dow Chemical Co., Midland, Mich., was announced recently by Mark E. Putnam, executive vice-president. The plant manufactures "Versene" and "Versenol" chelating agents. Frank Kottek, who held the title of production manager at Framingham, has been named a consultant to the plant manager.

Prior to his new appointment Mr. Sevougian was production superintendent at Framingham. With Dow since 1945, he was production superintendent for four years at the styrene plant operated by Dow for the U. S. government at Gardena, Calif., prior to its recent sale to another firm.

—★—

New Sequesterant

Process Chemical Specialties, Beverly, Mass., released last month a bulletin on "Teac-90." The product is said to have surface activity, penetrating and spreading power. It is suggested as a sequesterant, emulsion stabilizer and aid, anti-oxidant, and solubilizer. The product is said to improve solvent action of metal cleaners and polishes, to prevent breakdown of films due to metal ions, and to have possibilities for radioactive decontamination. With soaps and detergents it is claimed to exhibit a synergistic effect. Price per pound is 41 cents in 55-gallon drum lots, 50 cents in less than drum lots, 55 cents in less than five gallon lots, and $2.95 per gallon, F.O.B. Beverly, Mass.

—★—

Felcomex Expands

Felton Chemical Co., New York, announced recently that Felcomex, S. A., Mexico City, its Mexican operation, has moved into new and larger quarters. Juan Arenas Robledo is manager of Felcomex.

At the opening of the new offices in Mexico City the parent company was represented by Oscar L. Urrutia, manager of the Latin American Division of Felton Chemical Co.

Dermatitis Booklet

(*From Page* 121)

bacterial properties, pH concentration and cleansing power of many kinds of available industrial cleansers. These include solid, liquid, powdered and superfatted soaps; soluble and insoluble scrubbers; synthetic detergents; sulfonated oils and waterless cleansers.

Quaternaries in Cosmetics

(*From Page* 47)

Cetavlon (I.C.I.)	10 to 50 grams
Ethyl alcohol	2 ounces
Ether	2 ounces
Water	6 ounces

In dilution, use one half ounce of the solution to one part of water. This preparation is said to be very effective for clearing up cases of seborrhea. Caution is advised when using it near the eyes.

Quaternary amines can prevent development of undersirable odor by destroying the microorganisms responsible for its presence. Combinations of chlorophyll and a non-volatile quaternary in solution or suspension have been used for this purpose (British patent 699,-752).

Among the many other uses of quaternaries in the cosmetic and toiletries field are toothpastes, medicated face creams (acne etc.), treatment of diapers to prevent rash, and the treatment of athlete's foot. W. F. Lewis, *Soap, Perfumery & Cosmetics,* June 1955, pp. 642-645.

Floating Soaps

(*From Page* 44)

result that there is less free fat and alkali present to induce rancidification in the presence of occluded air. For the same reason, a fully boiled soap provides the best of all bases for subsequent aeration.

Thomssen and McCutcheon, commenting on the possibility of producing a very satisfactory floating soap by the semi-boiled process, give the following charge as one that has been found effective in use:

Choice tallow	43.0
Refined coconut oil	14.5
Caustic soda (35 Be)	31.5
Silicate of soda (40 Be)	1.1
Sodium hydrosulphite (50%)	0.2
Floating soap scraps	8.6
Perfume	0.2
	100.0

(I have reduced the original formula to a percentage basis in order to compare it with two old-style British formulae of similar type which respectively contain (a) 46.5 percent best mutton tallow, 17 coconut oil, 32 of caustic soda (66°Tw.) and 4.5 percent water; and (b) 56 percent beef tallow, 10 coconut oil and 3 caustic soda (66°Tw.) The first of these two formulae contains a few percent more water than the American formula.)

In a soap of this kind, it is probably as well to keep the coconut, palm kernel, murumuru or babassu oil as high as 15 to 25 percent, wherever these predominantly lauric acid-containing oils are available, in order to favor maximum free-lathering, which otherwise tends to be depressed by air bubble inclusions. Beef tallow is to be preferred to mutton tallow. Other suitable soapmaking fats may similarly be incorporated, provided that due care is taken to avoid an excess of unsaturated fatty acids. A little silicate and a proportion of scrap from previous floating soap batches, may also be added, as suggested by Thomssen and McCutcheon.

The method of manufacture of soap according to the formula above is given in detail in the excellent book by these two authors (see references). It may profitably be compared with the following typically British procedure:

(*To be concluded*)

New Patents

(*From Page* 89)

mass to approximately 100° C. and dispersing 5 to 15 parts by weight of water glass (sodium silicate) therethrough, and thereafter working up and forming the resulting composition into massive form.

Chemical Specialties

Who's who . . .

THE membership list of the Chemical Specialties Manufacturers Association reads like a Who's Who of the Chemical Specialties Industry. Its membership embraces the outstanding leaders in the field. Large and small, these companies during 41 years of association activity have found innumerable benefits through participation in CSMA affairs. Its most recent meeting was attended by 800 representatives of the industry.

If your firm is in the field of floor products, polishes, insecticides, disinfectants and deodorants, soap and detergent specialties, aerosol products, automotive chemicals or other specialties, you should investigate membership. Want further information?

H. W. HAMILTON, *Secretary*

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Chemical Specialties Manufacturers Association, Inc.

50 East 41st Street — New York 17, N. Y.

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Cologne	Lavender	Sweet Pea
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Florida		Wistaria

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Bouquet TB	Honeysuckle	New Mown Hay
Chypre	Jasmin	Oriental
Cologne	Jockey Club	Rose
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...the Right Propellant

"Genetron" aerosol propellants have long been the first choice of many leading aerosol fillers and marketers and the number is increasing daily. Now, with General Chemical's expanded line, an even greater variety of products can profit from the growing demand for the conveniences of "push-button living" which aerosols make possible.

"Genetron" propellants are ideally suited for formulating a wide range of aerosols... household, drug, cosmetic, agricultural, industrial and many others. Offering optimum vapor pressures and excellent compatibilities, they can give your product many priceless competitive advantages in terms of performance and sales appeal over products marketed in ordinary containers.

Following are the principal "Genetron" propellants which bring new versatility to aerosol packaging.

GENETRON 12: Dichlorodifluoromethane was the first fluorinated hydrocarbon gas to be widely used as an aerosol propellant. It still ranks as most important. Compatible with many product ingredients, it is often used in formulations where its high vapor pressure is required. An important use for "Genetron" 12 is with paint and lacquer formulations where its characteristics help eliminate "orange peel" and permit smooth, even coverage of paint.

GENETRON 11: Trichloromonofluoromethane came into prominent use as an aerosol propellant with the introduction of low-pressure containers. Many products, when formulated with straight "Genetron" 12, exceeded the ICC maximum pressure of 40 psi for this type of can. It was found that by using a blend of "Genetron" 11 and "Genetron" 12, the vapor pressure came well within the limits set for these "beer can" containers. "Genetron" 11's ability to act as an effective pressure depressant on "Genetron" 12, and its high solubility make it rate as a major aerosol propellant.

GENETRON 12-GENETRON 11 MIXES: Solutions of "Genetrons" 11 and 12 constitute the bulk of propellant requirements for present pressurized products, due to the optimum vapor pressures, excellent compatibility with numerous materials, and economical costs achieved for products packaged with these propellants. The 50:50 mixture has proven to be the most widely accepted blend in use, although additional solutions varying from 25-90% "Genetron" 12 are enjoying acceptance for a variety of products. Variations in the proportions of "Genetrons" 12 and 11 in a given formulation will result in corresponding variations in the particle size of the spray, solubility characteristics, hydrolysis rates and comparative cost.

GENETRON 320: Dichlorotetrafluoroethane was introduced as an aerosol propellant commercially when it was found that mixes of dichlorodifluoromethane and trichloromonofluoromethane, in certain formulations (notably those containing water), produced an undesirable reaction that affected the metal containers. It was found that by substituting "Genetron" 320 for trichloro-

TYPICAL AEROSOL PRODUCTS

Any product that can be brushed, daubed, dusted or sprayed on is a likely prospect for aerosol packaging. At right is a partial listing of the many products now being sold as aerosols which are formulated with "Genetron" Propellants.

- Adhesive sprays
- Air refreshers
- Antibiotics
- Anti-histamines
- Anti-perspirants
- Artificial snow
- Artists' fixatives
- Athlete's foot preventatives
- Bactericides
- Bandage sprays
- Belt lubricators
- Bird repellents
- Burn ointments
- Charcoal lighters
- Chrome preservatives
- Cleaning fluids
- Colognes
- Dairy insecticides
- Dehydrator sprays
- Deodorants
- Design layout inks
- Dust absorbers
- Dye penetrants
- Fabric color sprays
- Fabric renewers
- Fire extinguishers
- Flea killers (pet)
- Flower tints
- Fluorescent lacquers
- Foam preventatives
- Foot relief sprays
- Fur glazers and dyes
- Furniture polishes
- Garlic sprays
- Glare-proof glass sprays
- Golf ball renewers

Aerosol Propellants
for Every Aerosol Need!

monofluoromethane in these formulations the unfavorable reaction was eliminated. Blends of "Genetron" 320 and "Genetron" 12 made possible a number of new aerosol products in the drug and cosmetic field.

GENETRON 101: Monochlorodifluoroethane is finding increased use as a propellant for cosmetic formulations containing substantial proportions of alcohol, such as perfumes. In fact, some manufacturers indicate that "Genetron" 101 not only has unique odor stability, but in some cases actually enhances the fragrance of their perfumes. Important feature of "Genetron" 101 is that it is a single compound (not a mixture), possessing constant boiling point and thus maintaining constant vapor pressure and uniform performance during entire discharge of the aerosol. Other important characteristics of "Genetron" 101 are its high vapor volume and low liquid density. When filling on a fluid ounce basis, this means manufacturers can use a greater volume of product ingredient per ounce of propellant.

The following "Genetrons," because of one or more special characteristics, suggest uses principally as blending agents with the foregoing "Genetron" propellants.

GENETRON 226: Trichlorotrifluoroethane has a high liquid density and low vapor pressure that make it particularly suitable for blending with other "Genetrons" in such formulations as dry powders or foam products.

GENETRON 141: Monochlorodifluoromethane may be used as a blending agent where its high vapor pressure and excellent solvent properties are required.

GENETRON 100: Difluoroethane (1-1) has unique solvent characteristics that make it useful as a blending agent.

SPECIAL PROPELLANTS: Though the propellants listed on these pages represent the great bulk of those used in the Aerosol Industry, there are still others available for use where special properties are required.

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Lubricants
Metal lubricants
Metal polishes
Mildew preventatives
Moth proofers
Mold release sprays
Nasal relief sprays
Paints and lacquers
Paint and varnish removers
Penetrant oils
Perfumes
Plant insecticides
Plastic protective coatings
Polishing oils
Poultry inhalants
Residual insecticides
Rust cutters
Rust preventatives
Screen enamels
Shampoos
Shaving creams
Shoe polishes
Silverware coatings
Ski waxes
Soil fumigants
Spot removers
Static eliminators
Stencil inks
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BRETOL	***(Cetyl Dimethyl Ethyl Ammonium Bromide)*
DMBC	**(o-Dimethyl Benzyl Lauryl Dimethyl Ammonium Chloride)*
DBT	**(Dodecyl Benzyl Trimethyl Ammonium Chloride)*
SD***	***(Dimethyl Octadecenyl Ethyl Ammonium Bromide)*

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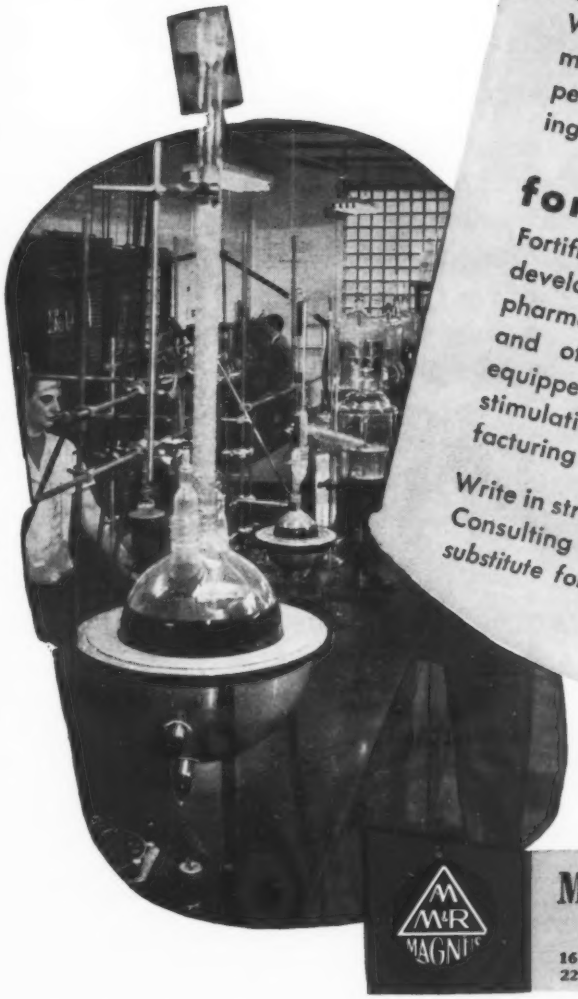

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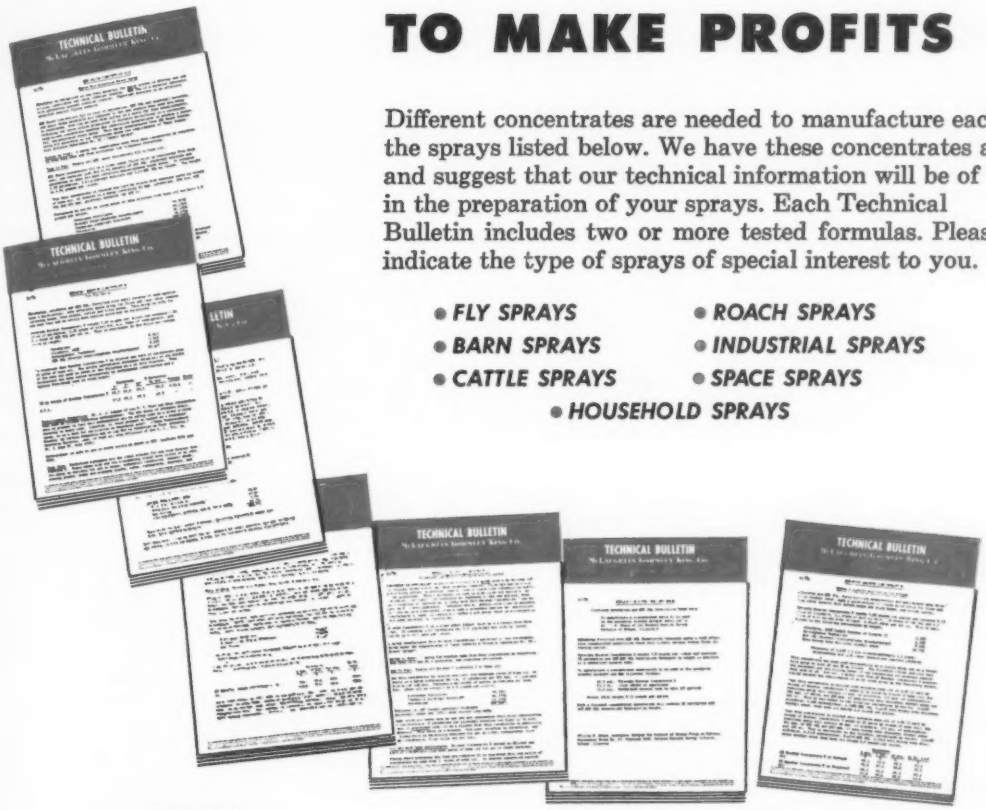
SEND FOR 7

Sprays and Ways

TO MAKE PROFITS



Different concentrates are needed to manufacture each of the sprays listed below. We have these concentrates available, and suggest that our technical information will be of value in the preparation of your sprays. Each Technical Bulletin includes two or more tested formulas. Please indicate the type of sprays of special interest to you.

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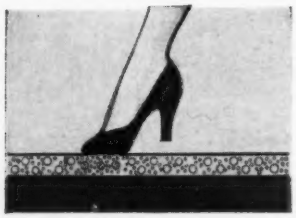

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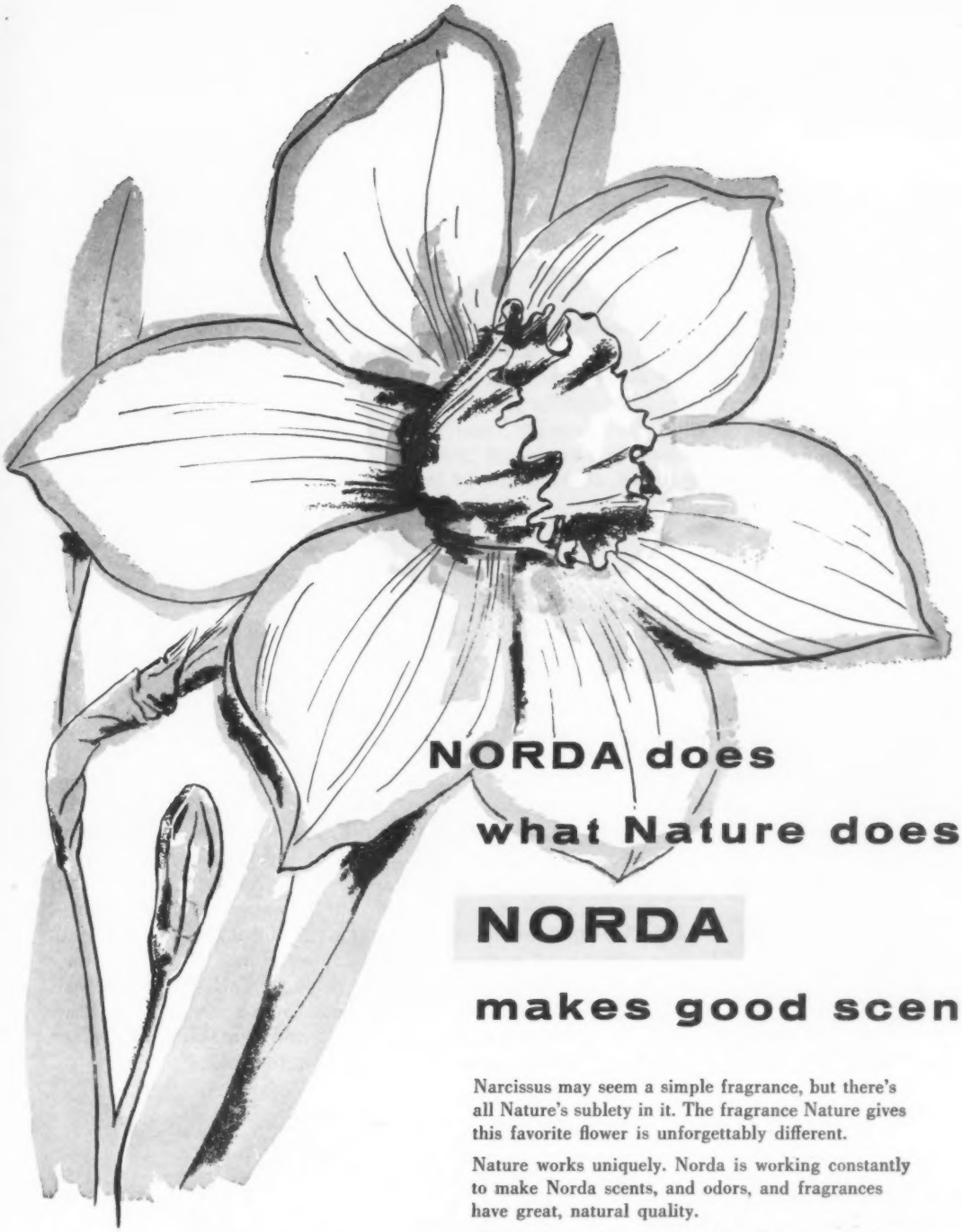

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spotlight on

uniformity, color stability
in oleic acid

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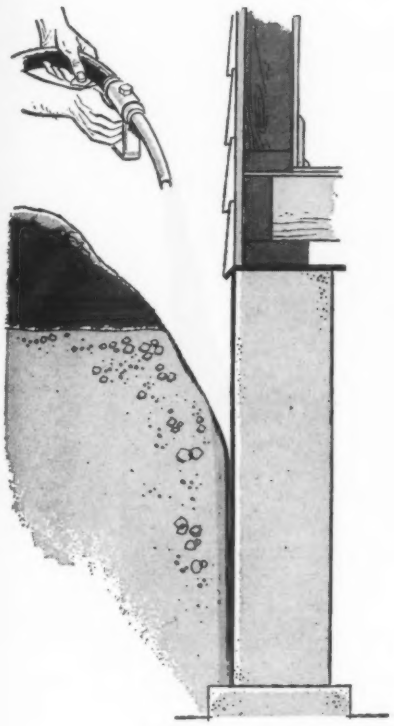

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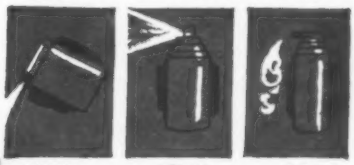

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—says S. Giachetti, president, Linco Products Distributing Company, Chicago, Ill.

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Trade-Mark

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PERFECTLY...

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HIGH COVERAGE

PERFECT SEAL

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MODERN 65	2-376	C5	$2.10	✓✓✓	✓✓✓				✓✓	✓✓✓	
ALAMASK® CA	2-193	CEDAR	2.20						✓✓		
BOUQUET LM	7331	LAV-MINT	2.50								
MINT	7351	MINT	2.75								
ALAMASK ND	1-773	SPICE	2.75								
BOUQUET PI	7321	PINE	3.15	✓			✓✓				
BOUQUET	7340	FLORAL	3.50						✓	✓	
LEMON	7212	LEMON	3.60	✓							
PINE	7338	PINE	3.75								
MINT	7313	MINT	4.00								
BOUQUET OZ.	7327	OZONE	4.25	✓✓✓	✓✓✓		✓	✓✓	✓		✓
COLOGNE	7329	COLOGNE	4.50								
BOUQUET BG	7200	COLOGNE	4.75		✓						
ORANGE BLOSSOM	7344	ORANGE BLOS.	5.00								
SWEET PEA	7201	SWEET PEA	5.00								
COLOGNE	7337	COLOGNE	5.00			✓	✓✓		✓		
PINE NEEDLE	7342	PINE	5.15			✓✓	✓✓				
MODERN 32	2-243	MODERN	5.25				✓		✓		✓
FOUGERE	7281	FOUGERE	5.15	✓							
LAVENDER H	7333	LAVENDER	5.25								
BOUQUET SP	2-500	SPICE	5.25	✓✓✓	✓✓	✓✓					
BOUQUET C	7290	CHYPRE	5.25								
BOUQUET	7282	LAV. FOUGERE	5.50				✓				
FLORAL	7330	FLORAL	5.75	✓		✓					
BOUQUET ST 65	2-477	FLORAL	5.75								
ROSE	7346	ROSE	5.85					✓			
FOUGERE	7320	FOUGERE	5.85			✓	✓✓✓				
LOCUST BLOSSOM	7339	LOCUST BLOS.	6.85								
GARDENIA	7306	GARDENIA	6.85								
BOUVARDIA	7341	BOUVARDIA	7.60								
COLOGNE	7348	COLOGNE	7.85		✓	✓	✓	✓	✓		
LILAC	7240	LILAC	8.35						✓		
LAVENDER	7283	LAVENDER	9.00		✓						
COLONIAL	7347	SPICE	9.90								
SCOTCH KILT	7349	HEATHER	12.50								
LILY-VALLEY	7350	LILY-VALLEY	13.75		✓				✓		
LILY-VALLEY	R-133	LILY-VALLEY	18.90		✓						
SHARL	6279	ORIENTAL	20.00								

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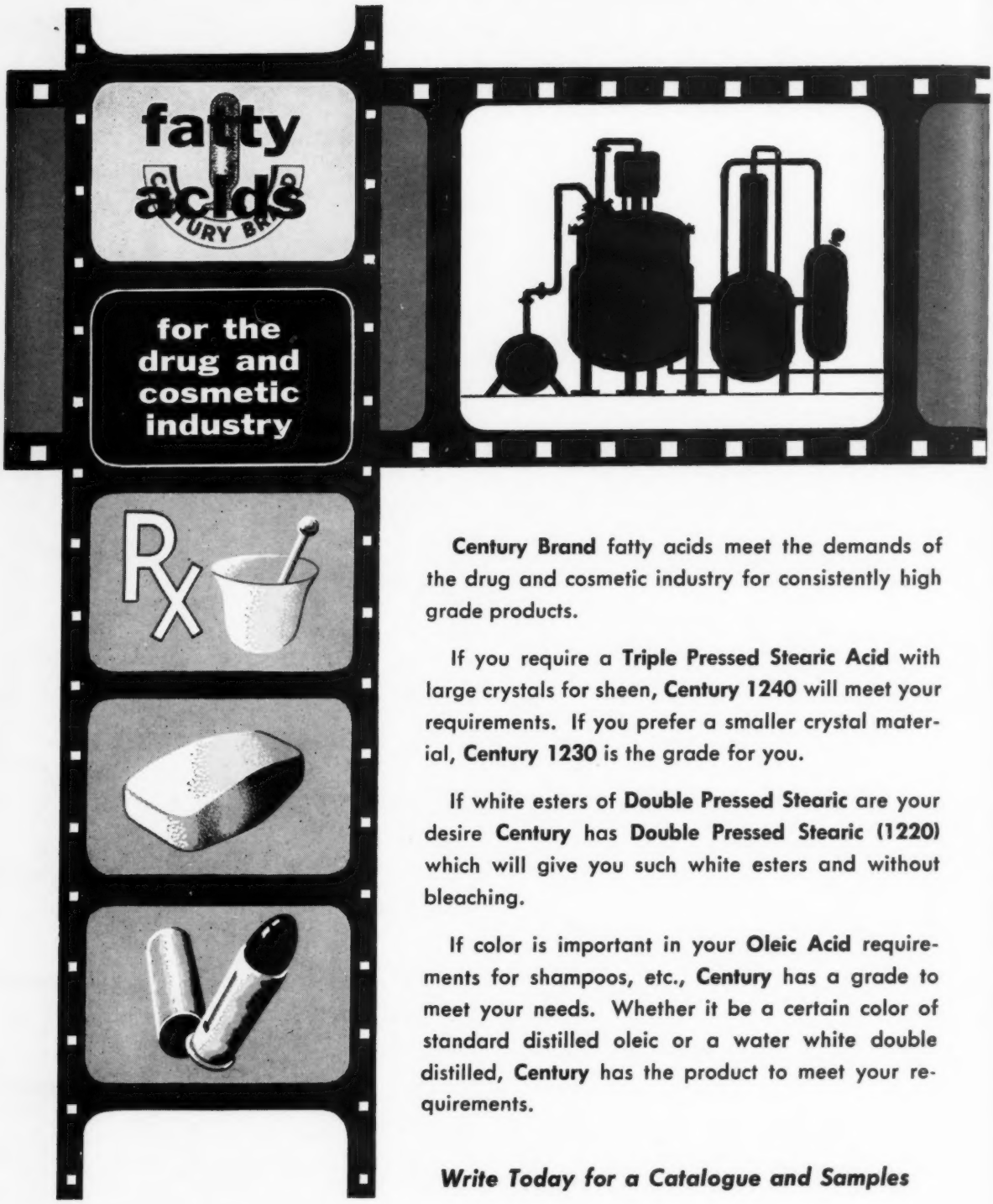

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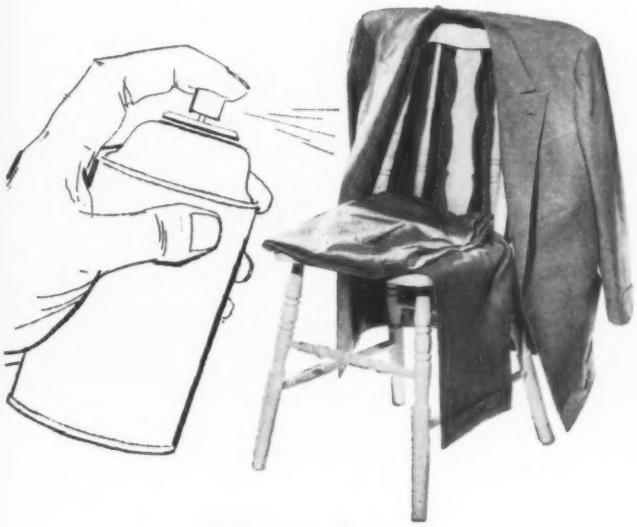

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Good-rite

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NOW REGISTERED FOR MOTHPROOFING, TOO

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(90% technical methoxychlor oil concentrate)

Insecticide knocks down flies as well as formulation costs

Tests show how economical methoxychlor can be the backbone of any spray.

	ESTIMATED % FLIES ON FLOOR					% DEAD
	2 Min.	4 Min.	6 Min.	8 Min.	10 Min.*	24 Hours*
0.25% methoxychlor	3	36	75	90	29	38
0.50% "	6	50	88	93	96	63
0.75% "	9	61	93	97	98	79
1.00% "	**16**	**71**	**95**	**97**	**99**	**85**

Methoxychlor is readily available. At 1% strength, it costs less than 8¢ per gallon of spray.

*Figures from standard Peet-Grady tests of methoxychlor space sprays

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FOR BETTER NO-RUB POLISHES

Petrolite

R-50

A labor, trouble and money saving package for manufacturers of no-rub polishes.

A blend of Petrolite microcrystalline wax and Petrolite-developed, high melting, phenolic terpene resin.

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- SIMPLIFIES RAW MATERIAL STORAGE
- INSURES AGAINST COLOR DEGRADATION
- SIMPLIFIES INVENTORY CONTROL
- REDUCES EQUIPMENT REQUIREMENTS
- COMPATIBLE WITH NO-RUB POLISH INGREDIENTS
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Petrolite R-50 is a blend of a high-melting, phenolic terpene resin, developed and manufactured by Petrolite, and Petrolite oxidized microcrystalline wax. It provides a light-colored resin blend suitable for use in all emulsion-polish-making equipment. It is convenient to store, easy to handle, readily emulsifiable, conservatively priced.

R-50 is available in 100-pound cartons. Samples, price information and suggested formulation data are available on request.

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40-50	65-80	190-200	4½ Max	2 Max

Petrolite Waxes are stocked at and available for delivery from Jersey City, New Jersey; Chicago, Illinois; Los Angeles, California and Kilgore, Texas.

R-50B

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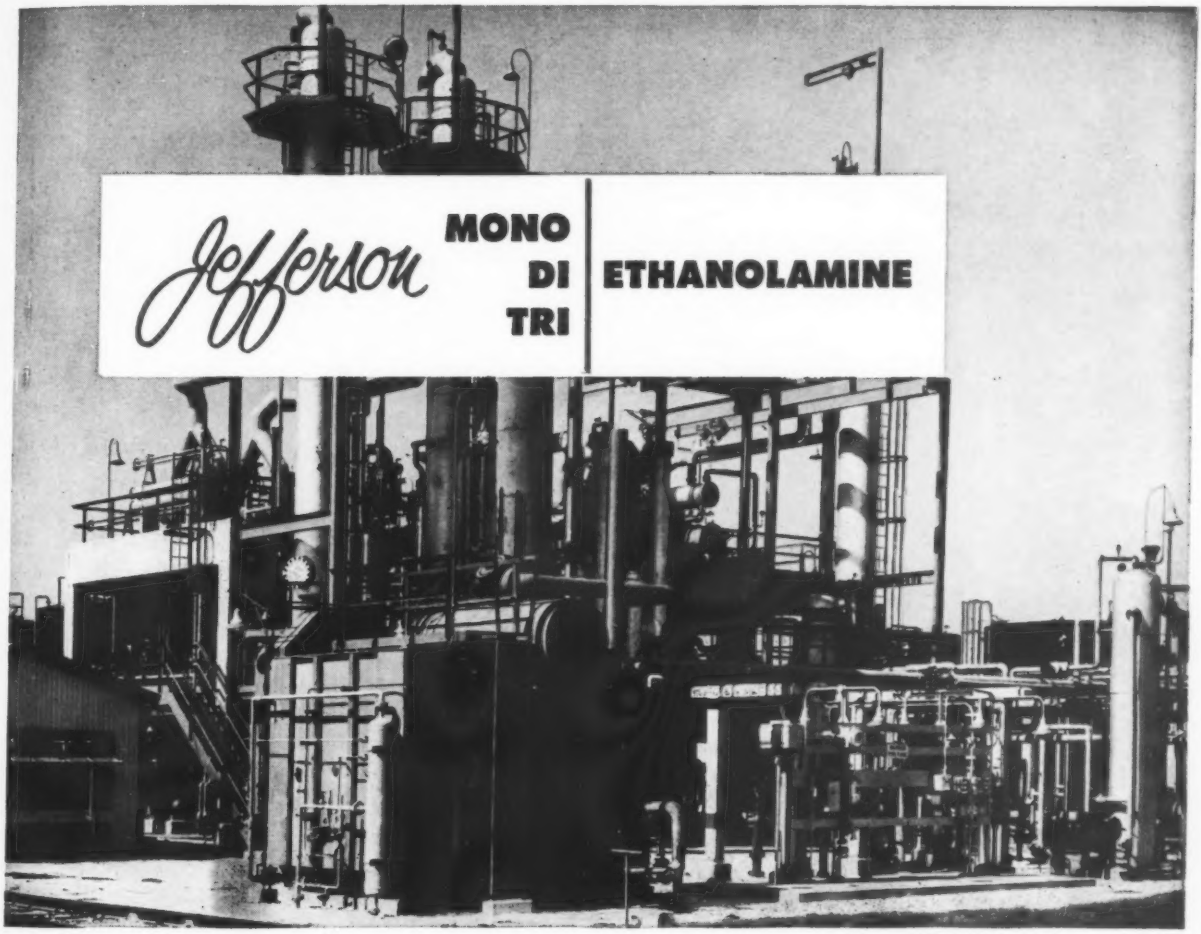

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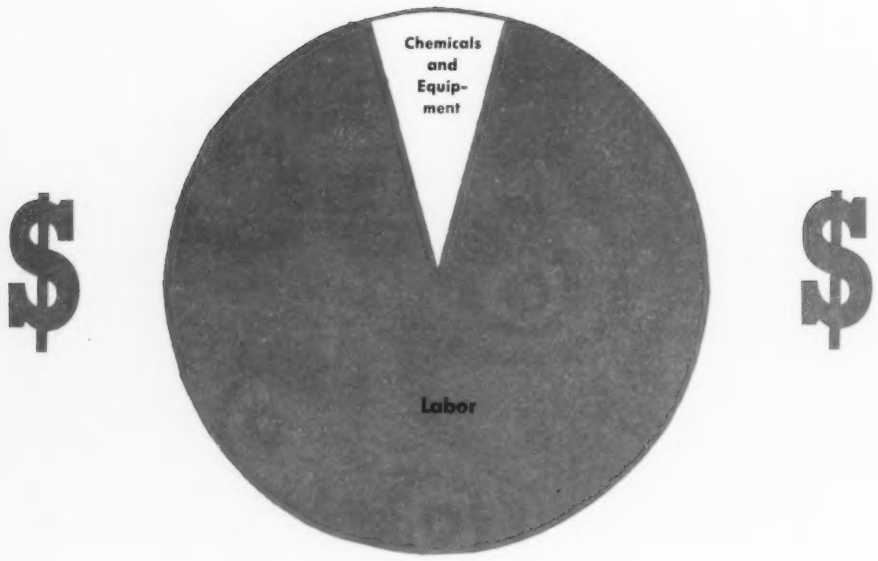

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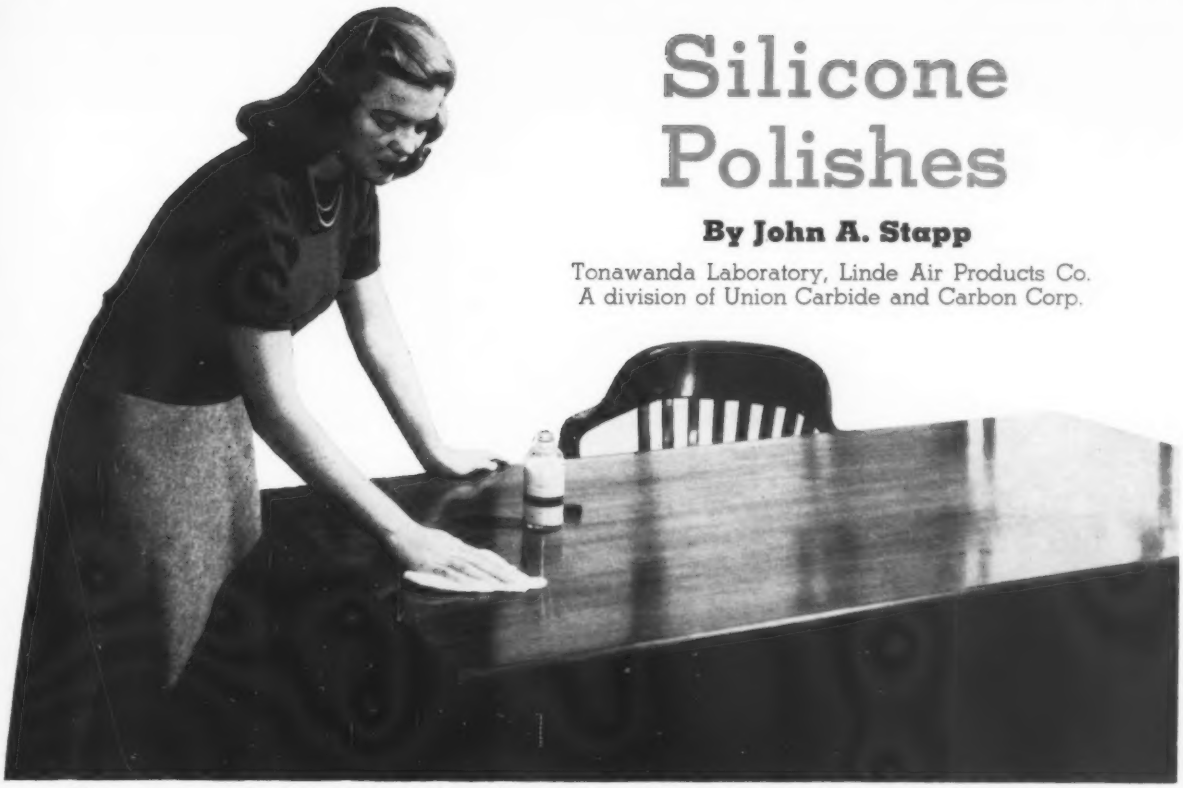
Silicone Polishes

By John A. Stapp

Tonawanda Laboratory, Linde Air Products Co.
A division of Union Carbide and Carbon Corp.



Silicones are now being used in non-flammable furniture polishes to give ease of application and long life.

USE of higher ratios of silicone is the answer to the growing demand for even more ease in polishing a car. The original silicone automobile polishes introduced a few years ago required that the car be well cleaned before polishing. The two-step car treatment was then developed.

Today, the one-shot cleaner-polisher is a reality. It has been achieved by the use of greater percentages of silicone than were used initially. Some formulas even dispense with the wax—although our laboratory work inclines us to recommend that wax be retained. In any case, it is difficult today to find a car polish on the market that does not have silicone in it.

Silicone's popularity in furniture polish is steadily increasing, and we now have a non-flammable, silicone furniture polish. Silicone is also being used in chrome, refrigerator and appliance polishes. Development of a good silicone polish for glass is in prospect.

Although much has been published about silicones in the last few years, it is important for people who develop, produce or sell formulations of all types to know why the silicones are so important, and to keep abreast of latest developments.

The term "silicones" is used to denote any of a multitude of silicon - containing compounds and polymers. Silicones are available in many forms as liquids, solids, resin solutions, elastomers and emulsions. Various silicone products have been developed to impart water repellency to bricks, masonry, asbestos shingles, paper, ceramics and textiles. Other silicones are incorporated in high temperature paints or used as Class H electrical insulating varnishes. Some silicones find wide use as release agents for rubber, plastics, glass and metal molding. Silicone rubbers find use in gaskets, seals, wire and cable insulation, vibration damping mounts, roll coverings, tubing, flexible bellows and cloth coatings, to name a few. Miscellaneous silicones find uses as antifoam agents, antiflood agents in paints, and cosmetic ingredients.

Silicones are derived basically from silica, or sand, and hydrocarbon chemicals. Thus they have unique properties intermediate between inorganic and organic materials.

By intricate chemical processing methods, silicon metal (obtained by the reduction of silica) is joined with the appropriate organic materials to form organosilicon monomers which are then mixed in the proper proportions and further processed to polymeric silicone products of all types.

Silicone Oil Structure

PRIMARILY we are concerned in this article with dimethyl silicone oils, which have the chemical structure given below (figure 1)

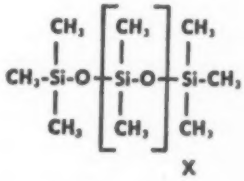


Fig. 1. Di-Methyl Silicone Oil

The dimethyl oils are available in a wide range of viscosities, but for most polish applications, oils in the viscosity range of 100 to 500 centistokes are used.

Here are the properties which make the dimethyl silicone oils so useful in polish formulations:

Thermal stability; low surface tension; incompatibility with waxes (will not soften the wax); inertness (non toxic); high degree of slip; minimum change of viscosity with temperature; chemical resistance.

These are the qualities that have taken the drudgery out of polishing a car. Although the silicones have been used in automobile polishes for only five or six years, the motoring public is so used to them that the back-breaking, time-consuming polishes of a few years ago already seem nearly as remote as the automobile crank.

But motorists have found that ease of putting on is only one of the advantages of the silicones. They also form a film that has thermal stability and water resistance, thus helping protect the surface and preserve the paint on the car.

Dimethyl silicone oils, after their acceptance in the automobile field, were incorporated in furniture, chrome, refrigerator and appliance polishes.

New Trend in Auto Polishes

THE first silicone-base car polish introduced consisted of 1.5-2.0 percent silicone, three to four percent wax and the balance, fast-evaporating naphtha. The silicone was soluble in the naphtha and the wax was dispersed in fine particle size. This type formulation is an excellent polish, but cannot remove oxidized paint from car surfaces.

Since the paint on a great majority of cars has oxidized somewhat, a pre-cleaner must be used before applying the liquid wax-silicone, solvent-type polish. At first, conventional liquid or paste cleaners were used, but soon silicone-base cleaners appeared. These silicone cleaner-polishes were emulsions which usually contained wax, silicone, mild abrasive, solvent and water. The silicone content was rarely over two percent and sometimes wax was omitted. For a time the silicone emulsion cleaner and wax-solvent-silicone type polish were sold in a companion package deal for a two-step car treatment.

The latest trend in silicone car polishes has been to eliminate the separate cleaning and polishing operations. By modification of formulas it has been found that cleaning and polishing can be accomplished in one operation. Therefore the "one-shot" cleaner-polish is quicker to apply than the two-step treatment and essentially equivalent results are obtained.

An example of the "one-shot" car cleaner-polish is the following formula developed in our laboratories. It contains five percent silicone and two percent wax. We prefer to retain the wax in this formula because of durability, but some people prefer to omit it.

"One-Shot" Silicone Car Cleaner-Polish 345

Silicone Oil	5.0 weight percent
Oxidized microcrystalline Wax (Crown 23)	2.0
Oleic acid	2.0
Mineral Spirits	40.0
Snowfloss	6.7
Superfloss	2.2
Franklin Clay	2.2
Morpholine	0.9
Water	39.0

A good, but less expensive formula than the above is as follows:

"One-Shot" Silicone Car Cleaner-Polish 344

Silicone Oil	4.0 weight percent
Oxidized microcrystalline Wax A (Crown 23)	2.0
Oleic acid	2.0
Mineral Spirits	41.1
Snowfloss	6.7
Superfloss	2.2
Morpholine	0.9
Water	41.1

Both of these formulas are easy to apply, have good cleaning action and polish easily to high gloss. The resultant film is highly water repellent and has good durability.

To make this polish, heat the wax in about 20 percent of the solvent until it is molten, then add the silicone, oleic acid and the balance of the solvent, and bring the clear solution to 158 degrees F., and hold at this temperature. Necessary fire precautions should be observed in heating this solvent solution because it is flammable.

In a separate vessel of sufficiently large size to hold the finished polish, add the water and with good agitation (such as obtained with a "Lightnin" mixer*) add the abrasive mixture in small portions until all is added and a smooth slurry results. Then mix in the morpholine.

The emulsion is formed by slowly adding the hot solvent solution of wax, oleic acid, and silicone to the agitated room temperature slurry of abrasive in the morpholine and water. This is a very stable emulsion and the abrasive suspends very well.

Paste Waxes Popular

TO the average consumer paste wax polishes are the best that can be used. They have the reputation of being the most durable polish (though we have no conclusive evidence to support this). Nevertheless they undoubtedly have good market value. Here are two typical paste wax formulas containing silicone.

Silicone Paste Auto Polishes

Ingredients in Weight Pct.	Formula A	Formula B
Silicone Oil	10.0	5.0
Carnauba Wax	7.0	6.0
Oxidized Microcrystalline Wax B (Estawax)	7.0	6.0
Microcrystalline Wax		

*Registered trade name of Mixing Equipment Co., Rochester, N. Y.

Trend is to "one-shot" car cleaner-polishes. Non-flammable furniture polish is developed.

(Bee Square amber)	7.0	6.0
Plasticizing Wax D (Cerese)	4.2	3.6
Mineral Spirits	64.8	73.4

Either of these formulas is prepared by heating the waxes, silicone and about 20 percent of the mineral spirits to 175 degrees F. until all the waxes are melted. The balance of the mineral spirits is then added and the mixture stirred slowly until cooled to 120 degrees F., then poured and allowed to gel.

Economically it is difficult to add enough silicone to a paste polish to obtain the same benefits provided by liquid polishes and cleaners to which silicones have been added. For instance, in the "one-shot" cleaner-polishes mentioned the silicone-to-wax ratio is 2-2.5:1 whereas in the wax-paste polishes the ratio is 0.2-0.4:1. To increase the silicone-to-wax ratio in the paste polish to the level used in the liquid polish would probably make the polish too expensive.

Formula A is easy to apply and has a good gloss, while Formula B is equally good in gloss but requires more rubbing to produce gloss.

It might be mentioned in passing that it is possible to formulate a "one-shot" paste wax car cleaner-polish by incorporation of a mild abrasive in either formulas A or B. There are indications that this type of product is gaining in favor with the public.

Non-Flammable Furniture Polish

THE liquid wax-silicone, solvent polish mentioned earlier is also a good furniture polish. Generally the formula is varied slightly from the version used on cars. The wax-to-silicone ratio is adjusted to give optimum polishing characteristics on furniture. In addition, a slightly higher viscosity silicone might be used. This type of polish has two main defects: it is flammable and does not clean furniture very well. However, the lack of cleaning ability in some cases is corrected by the addition of water.

There is need today for a good emulsion-base silicone polish containing wax and silicone. To date institutional use of the wax-solvent-silicone polish has been limited because of fire hazard considerations. The following polish is an emulsion furniture polish which applies easily, cleans well, is non-flammable, and produces a water and stain resistant film on furniture. It does a job comparable to the wax-silicone solvent-type polish without its disadvantages.

One shot "wipe-on-wipe-off" car polishes are now a reality, thanks to the use of silicone oils.

Silicone Cream Furniture Polish

Silicone Oil	2.50 weight percent
Oxidized Micro-Crystalline Wax A (Crown 23)	2.07
Carnauba Wax	2.07
Stearic Acid (Hystrene T-70)	2.76
Triethanolamine	1.65
Mineral Spirits	24.20
Boiling Water	64.75

To make this polish, heat the silicone, waxes and stearic acid in about 20 percent of the mineral spirits to about 175 degrees F. until the waxes are melted. Then add the triethanolamine, the balance of the mineral spirits and heat to 195 degrees F. until a clear solution results. Add the hot solvent solution to the boiling water slowly with good agitation ("Lightnin" mixer). After all the solvent solution is added, continue agitating at a slow speed until the emulsion cools. This emulsion tends to cream slightly on standing but is easily reconstituted by shaking. The grade of stearic acid used appears to have a major effect in the emulsion stability.

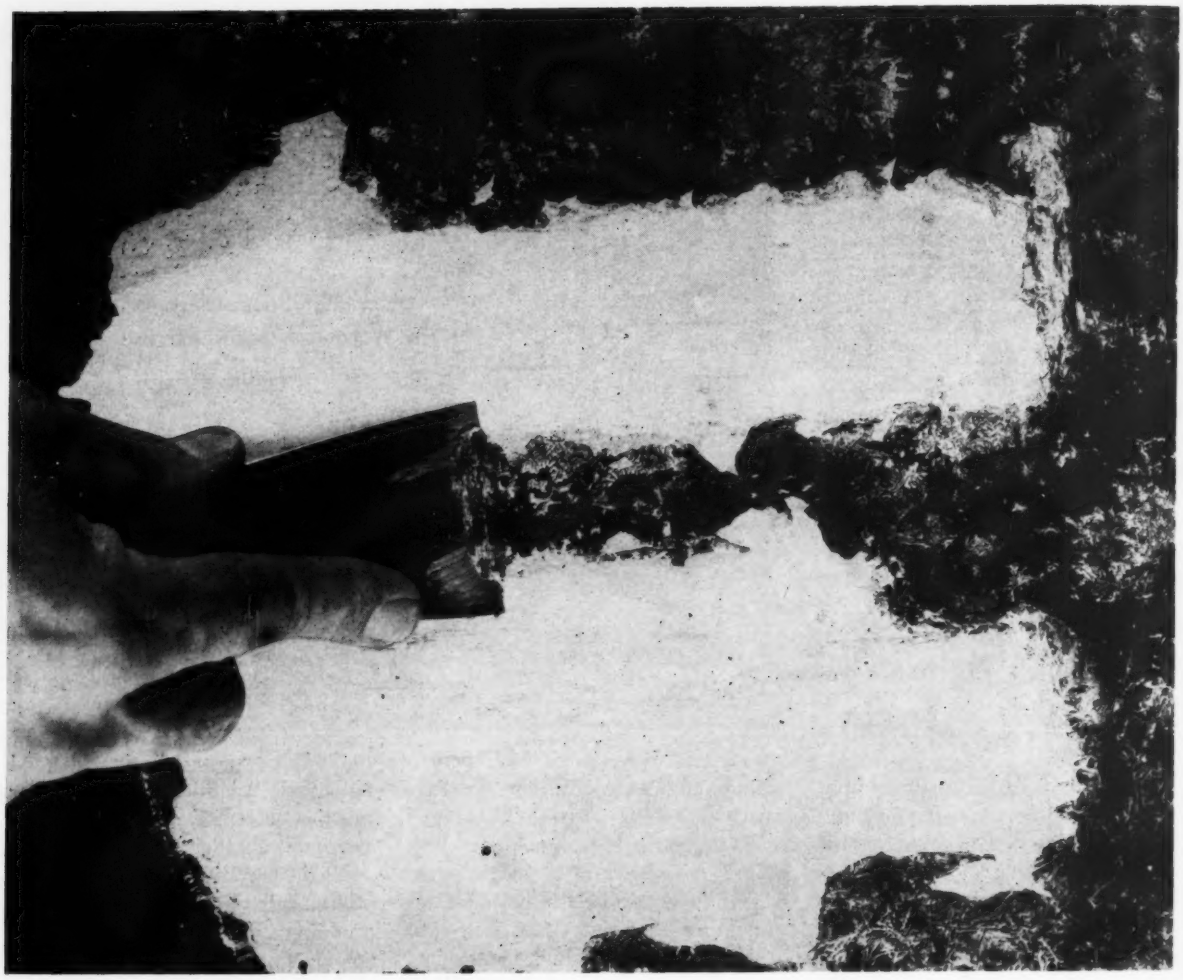
A suggested formulation for a paste-wax furniture polish follows:

Silicone Oil	9 weight-percent
Carnauba Wax	13
Microcrystalline Wax C (Bee Square Amber)	5
Plasticizing Wax D (Cerese)	3
Mineral Spirits	70

This is made up in the same manner as the previously mentioned car paste wax formulations. Whether there is a ready market for a silicone wax paste furniture polish is not known at this time.

Other silicone oils are available or are under development, (as shown in figures 2 and 3 below), where various organic groupings be-

(*Turn to Page* 195)



Wrinkling of paint film to which stripper has been applied is shown in checked white areas on dark background. Large white area in center around spatula has had paint completely removed following action of stripper and scraping by spatula.

Non-Flammable Paint Strippers

Relative Efficiencies of Chlorinated Solvents and Primary Solutions

By Bernard Berkeley and Daniel Schoenholz,
Foster D. Snell, Inc.
John P. Sheehy,* Solvay Process Division,
Allied Chemical and Dye Corp.

UNTIL the beginning of the twentieth century, solvent paint removers consisted primarily of blends of solvents, such as benzol, toluol, acetone, ethyl acetate and ethanol. These had been used in combination with thickeners and evaporation retardants. The formulations were brought to their high degree of efficiency largely as a result of the research efforts of Carleton Ellis and Boris Lougovoy; whose many patents dominated the paint removal field.

With the introduction of a multitude of new and more resistant types of synthetic resins and polymers in protective and decorative coatings, the problem of removal

*Paper presented at 41st midyear meeting of Chemical Specialties Manufacturers Association, Chicago, May 16, 1955.

became increasingly difficult. At the same time, industry was becoming increasingly aware of the flammable and toxic characteristics of these low boiling solvents. Then, attention was focused on chlorinated solvents as a means of extending the usefulness of paint removers while simultaneously reducing fire and health hazards.

Published technical information dealing with the subject of chlorinated solvents in paint strippers is concentrated in patents, government reports, and industrial brochures. The professional journals and publications are practically devoid of articles on non-flammable paint removers as any newcomer to the field quickly discovers. It is the purpose of this series of papers to present basic information on the whys and wherefores of modern paint strippers, thus, partially compensating for the reticence of investigators to make public their data.

Unquestionably, today, the most widely used chlorinated solvent for paint removal is methylene chloride. In 1947 Kuentzel and Liger evaluated the relative stripping powers of a number of chlorinated solvents. In that study methylene chloride was found to be the most effective solvent. The results of our tests with an expanded list of solvents confirmed the findings of Kuentzel and Liger.

Preparing Test Samples

A TYPICAL non-flammable scrape-off paint remover composition was selected as the vehicle for evaluation of the relative stripping efficiencies of chlorinated solvents. The basic formula when used with methylene chloride had previously been tested and found suitable for removal of diverse types of organic coatings.

The proportions used to prepare laboratory quantities of the test compounds are shown below:

Basic Formulation	
Chlorinated solvent	90 milliliters
Paraffin wax	2 grams
Methanol	10 milliliters
Methyl cellulose	1.3 grams

Table I. Relative Stripping Efficiencies of Chlorinated Solvents in Standard Paint Remover

Solvent		Rating (Methylene Chloride = 100%)
Methylene chloride	(CH_2Cl_2)	100 (45 seconds)
Chloroform	($CHCl_3$)	69
Ethylene dichloride	($CH_2Cl \cdot CH_2Cl$)	45
Trichloroethylene	($CHCl : CCL_2$)	43
Monochlorobenzene	(C_6H_5Cl)	34
Carbon tetrachloride	(CCl_4)	22
1, 2, 3, Trichloropropane	($CH_2Cl \cdot CHCl \cdot CH_2Cl$)	17
Propylene dichloride	($CH_3 \cdot CHCl \cdot CH_2Cl$)	15
Orthodichlorobenzene	($C_6H_4Cl_2$)	13
1, 2, 4-Trichlorobenzene	($C_6H_3Cl_3$)	10
Perchloroethylene	($Cl_2C : CCl_2$)	7
Methyl chloroform	($CH_3 \cdot CCl_3$)	0 (no effect in 4 hrs.)

In paint removers, paraffin wax serves as an evaporation retarder for volatile solvents; methyl cellulose acts as a thickener to prevent run-off from vertical and inclined surfaces; and methyl alcohol is present to solvate the methyl cellulose and reduce the solubility of the wax in the solvent.

While there are alternate methods of preparation that can be used to compound paint removers, we found it convenient in the laboratory to melt the paraffin wax in jars, then add test solvent followed by methanol and methyl cellulose. The samples were then placed on a jar roller and allowed to mix overnight.

Brightened and degreased panels of SAE 1010, low carbon, cold rolled steel, 3 x 6 x 1/16 inches, were dip-coated with an oleoresinous type of enamel paint. The panels were then placed in a horizontal position to air dry and age for seven days in a dust free chamber set at 50 percent relative humidity and a temperature of 75°F.

Method of Test

THE edges of each coated panel were built up to a height of approximately 10 mils with tape to form a shallow trough two by five inches. Films of test stripper were drawn down across the panel with a straight edge. We found it necessary to use this trough procedure rather than a conventional drawn-down method by doctor bladey in order to prevent solvent spread and maintain a uniform thickness throughout each test.

Trial tests were made with each compound to establish the approximate time required for extensive surface wrinkling to occur. The tests were then repeated checking the coatings at five second intervals starting 25 seconds before the first observed values. The time required to strip the paint finish completely was taken as the measure of efficiency. The results of these tests are shown in Table 1. In almost all cases, complete wrinkling occurred within a relatively short period after the first sign of surface change was observed. The fundamental conditions existing when wrinkling occurs is a swollen gel. When normally insoluble high polymers are placed in contact with an active solvent, the polymer absorbs solvent and expands until an equilibrium condition occurs. This state, of course, is dependent upon the nature of the solvent and the polymer and upon the temperature of the system. In order to accommodate the increased volume and still remain within the original perimeter, the polymer tends to fold or wrinkle so as to relieve internal stresses. The solvent mixtures solvate the active groups of the polymer and in doing so reduce solid to solid adhesion. The forces build up in the polymer generally, as a result of swelling together with the weakened

Table II. Wrinkling Time of Binary Solutions Compared with Methylene Chloride on Water-Based Paints

Co-solvent	% by vol. Added	(Time in minutes) System A-1 (Polyvinyl Acetate)	(Time in sec.) System A-2 (Acrylic)	(Time in sec.) System A-3 (Styrene-Butadiene)
Methylene Chloride	100	15½	129	122
Methanol	5	17	118	122
Methanol	40	21*	189*	138
Methylacetate	5	21	135	101
Methylacetate	40	25*	165*	181*
Acetone	5	18*	140	138
Acetone	40	25*	270*	570*
Cellosolve	5	25*	150	119
Cellosolve	40	25*	240*	—
Benzol	5	25*	129*	113
Benzol	40	25*	225*	—
Mineral Spirits	5	20*	150*	195*
Mineral Spirits	40	25*	270*	—
Chloroform	5	25*	120	154
Chloroform	40	25	146	—
Dimethylformamide	5	25*	120	—
Dimethylformamide	40	25*	270	—

*Incomplete Removal of Film

adhesion, are sufficiently high to tear the film loose from the surface. The type of wrinkle formation varies for each solvent and polymer depending on the rate of solvent penetration into the polymer and the inherent adhesive and cohesive properties of the film. In the case of methylene chloride and oleoresinous coatings, deterioration of both adhesive and cohesive bonds proceeds at much the same speed. There is rapid parting of the film from the substrate and almost as rapid rupturing of the film itself. The visual results are sometimes quite dramatic as tiny fragments of the film are ejected from the surface in a series of minor explosions.

Table III. Wrinkling Time of Binary Solutions Compared with Methylene Chloride on Oils and Oleoresinous Products

Co-solvent	% by vol. Added	System B-1 (Drying Oil) (sec.)	System B-2 (Soya Alkyd) (sec.)	System B-3 (Phenolic Air Dry) (sec.)	System B-4 (Phenolic (Baked) (min.)
Methylene Chloride	100	144	83*	NR	NR[a]
Methanol	5	133	53	90	NR[a]
Methanol	40	157	65	43	NR[a]
Methylacetate	5	158	51*	NR	NR[a]
Methylacetate	40	218	129	NR	NR[a]
Acetone	5	174	97*	NR	NR[a]
Acetone	40	280	145*	420*	NR[a]
Cellosolve	5	145	73	NR	NR[a]
Cellosolve	40	280	190*	420*	NR[a]
Benzol	5	153	130*	NR	NR[a]
Benzol	40	230	191*	NR	NR[a]
Mineral Spirits	5	—	125*	NR	NR[a]
Mineral Spirits	40	240	300*	NR	NR[a]
Chloroform	5	155	90*	NR	NR[a]
Chloroform	40	151	85*	NR	NR[a]
Dimethylformamide	5	155	85	300*	NR[a]
Dimethylformamide	40	350	230*	120	NR[a]

*Incomplete removal
NR No removal after 15 minutes
NR[a] No removal after 90 minutes

Discussion of Results

THE results in Table I clearly show the relative superiority of methylene chloride over other chlorinated solvents. Chloroform, which is the second fastest solvent, is only 69 percent as rapid as methylene chloride; ethylene dichloride is only 45 percent as fast.

We surmise from the data that in general efficiency of chlorinated solvents is reduced as chlorine substitution is increased. This effect is easily illustrated by the following arrangement of the data:

Compound	Efficiency
Dichloromethane (methylene chloride)	100%
Trichloromethane (chloroform)	69%
Tetrachloromethane (carbon tetrachloride)	24%
Monochlorobenzene	36%
Dichlorobenzene	13%
Trichlorobenzene	10%

Theoretically, methylchloride or monochloromethane should be more effective than methylene chloride provided that the efficiencies are compared at a temperature below the boiling point of methyl chloride.

The factor of carbon length and stereochemistry of the chlorinated compounds are not definitely depicted by the data. However, the indication is strong that efficiency is decreased as chain length is increased.

Binary Solvent Effects

METHYLENE chloride by itself is fairly effective for diverse types of coatings. However, it is recognized that in many instances the use of a co-solvent with methylene chloride is desirable to widen the range of its usefulness further, or to increase the speed of stripping action. The incorporation of co-solvent is further dictated by the practical need for deriving maximum benefits from the additives that are always present with methylene chloride—such as evaporation retarders and thickeners.

Table IV. Wrinkling Time of Binary Solutions Compared with Methylene Chloride on Rubber Base Paints

Co-solvent	% by vol. Added	(Time in Seconds) System C-1 (Chlorinated Rubber)	System C-2 (Styrene-Butadiene)
Methylene Chloride	—	480*	45
Methanol	5	90	—
Methanol	40	68	—
Methylacetate	5	230*	—
Methylacetate	40	110	—
Acetone	5	65*	—
Acetone	40	82*	—
Cellosolve	5	91*	—
Cellosolve	40	170*	—
Benzol	5	140*	—
Benzol	40	630*	—
Mineral Spirits	5	318*	—
Mineral Spirits	40	600*	—
Chloroform	5	185*	—
Chloroform	40	190*	—
Dimethylformamide	5	88	—
Dimethylformamide	40	315*	—

*Incomplete removal

A series of experiments were conducted to delineate the effectiveness of binary combinations using selected co-solvents. We chose for this study one compound from each of the following types of organic classes: alcohol, ester, ketone, aromatic and aliphatic hydrocarbon, chlorinated methane, glycol-ether and dialkyl amide. The actual solvent selection was restricted to the smallest member of each class of solvent since it was believed that molecular size and polarity of the additives have an important influence on the action of paint strippers.

The action of the co-solvent is believed to be due to a combination of the following effects viz:

1. Dissociation of groupings in the coating which are not dissociated by the primary solvent;

2. Dissociation of the primary solvent;

3. Improvement of solvent on admixed resinous substances frequently used to modify the properties of coatings.

Should the polymer be dissolved at the expense of becoming swollen, wrinkling would not be apt to occur and removal by scraping or flushing would be more difficult.

The representative additive solvents selected for trial with methylene chloride included the following:

Methyl alcohol	Cellosolve
Methyl acetate	Mineral Spirits
Acetone	Chloroform
Benzol	Dimethylformamide

Each of the above solvents was tested at two concentrations, five and 40 percent, in order to ascertain their effects as co-solvents in massive and minor quantities.

Methods of Test

VARIOUS test procedures were considered for the evaluation of the stripping efficiencies of bi-com-

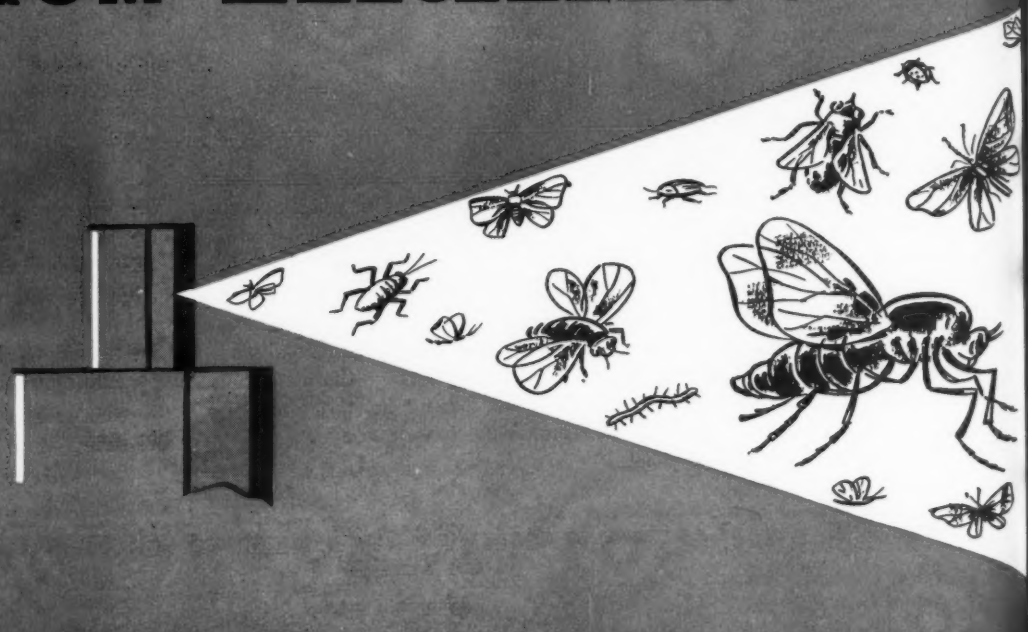
(*Turn to Page* 213)

Table V. Wrinkling Time of Binary Solutions Compared with Methylene Chloride on Varnishes

Co-solvent	% by vol. Added	(Time in Seconds) System D-1 (Epon)	System D-2 (Styrenated Alkyd)	System D-3 (Drying Oils)	System D-4 (Phenolic Resin)	System D-5 (Urea-Alkyd)	System D-6 (Urea-Melamine)	System D-7 (Silicone)
Methylene Chloride	100	40	NR	26	51*	66*	900*	30
Methanol	5	—	60	—	43	29	165*	—
Methanol	40	—	210	—	43	31	250*	—
Methylacetate	5	—	280*	—	32	41	480*	—
Methylacetate	40	—	210*	—	93*	66	450*	—
Acetone	5	—	NR	—	72	112*	480*	—
Acetone	40	—	NR	—	270*	85*	NR*	—
Celiosolve	5	—	VSR	—	48	64*	420*	—
Cellosolve	40	—	VSR	—	162*	111*	NR*	—
Benzol	5	—	360	—	43	80*	NR*	—
Benzol	40	—	NR	—	180*	147*	NR*	—
Mineral Spirits	5	—	NR	—	72*	83	900*	—
Mineral Spirits	40	—	NR	—	77*	277*	NR*	—
Chloroform	5	—	VSR	—	41	53	700*	—
Chloroform	40	—	NR	—	38	49	NR*	—
Dimethylformamide	5	—	120*	—	28	52	900*	—
Dimethylformamide	40	—	180*	—	64	65	1020*	—

*Incomplete removal
NR—No removal after 10 mins.
BSR—Very slight removal — 10 mins.
NR*—No removal after 15 mins.

THERE IS NO ESCAPE FROM thanite®



When Thanite is included in any formulation, mosquitoes and flies can't climb above the fog or mist and "wait it out." Thanite's quick knockdown makes them stay put and assures maximum kill. That's one good reason why so many pest control experts add two to four percent Thanite to DDT and other residuals.

In household sprays and aerosols, Thanite can partially replace higher costing ingredients while still providing quick knockdown and high kill. As little as two percent Thanite in household sprays and one percent in aerosols will provide maximum efficiency and economy. Technical data on the properties and uses of Thanite is available by writing to Hercules.

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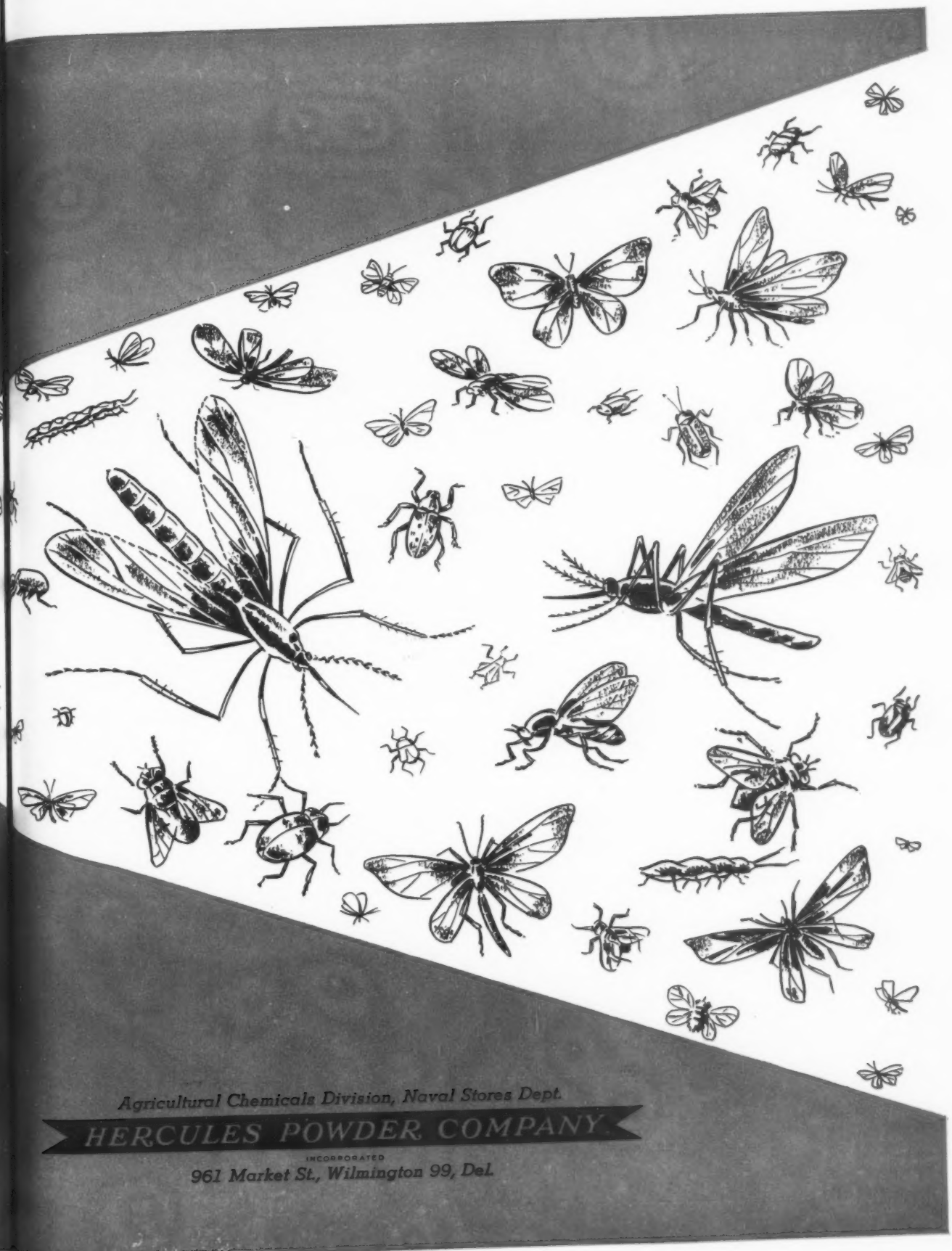

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DISPERSION AND WETTING OF SOLIDS		
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10. Emulsifiable Solvent Cleaners	Dispersing Agent for Oil and Grease Deposits	Acts as Emulsifying Agent
11. Dry Cleaning Compounds	Linking agent for Water and Solvent	Loosens Dirt Absorbed by Fabric
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Illuminated plastic globe of world facing entrance to administration building in Racine showing location of company's headquarters, subsidiaries, manufacturing and processing distributors.

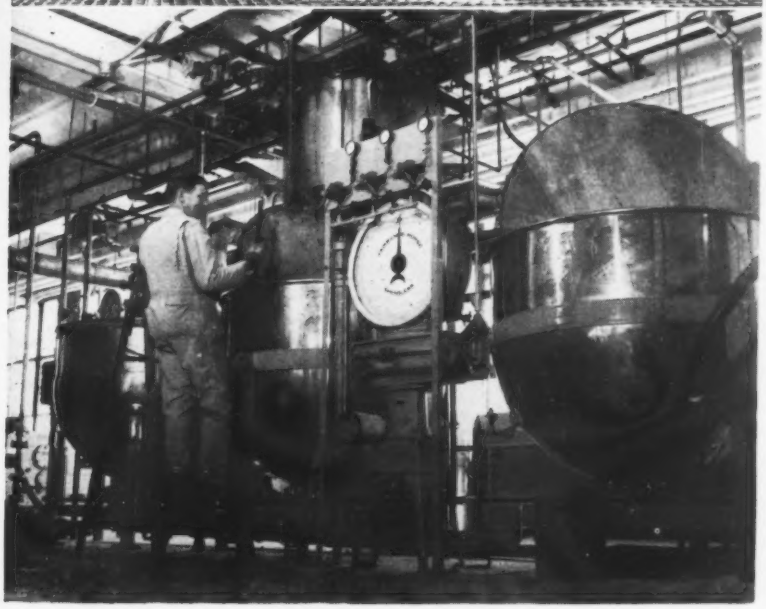
The "Great Workroom" in administration building. Desks and chairs of unusual modern design by Frank Lloyd Wright, world famous architect, who designed research tower and new administration building. Upright supports are referred to as "tees," because of their resemblance to golf tees.

Johnson's Modern Wax Plant

Glass tubing serves as partitions for offices of Johnson's technical service department, located in administration and research center.

First Johnson wax plant, which company rented part of in 1895 at 13th and Clark Sts., Racine.

Samuel Curtis Johnson, founder and first president of the company.



The tank farm (top) in wax building where finished solvent type wax products are stored after manufacturing.

Stainless steel mixing kettles, below, used in manufacture of wax products.

Top right: research laboratory in corner of one of main floors in new research and development tower. Horizontal glass tubing makes up outer wall.

Strikingly modern entrance (lower right) to administration building.

Herbert Fisk Johnson, Sr., son of founder, was president from 1919-1928.

Today's Johnson plant consists of 32 major buildings which cover 17 acres. Other plants are in Canada, England, France, Australia and Brazil.

In this modern plant at Cincinnati, Ohio

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L-RETARDANT ACTION of "Ludox" is strikingly demonstrated piece of wallboard which has just been brushed with carbon black. sible message painted on with "Ludox" solution is revealed n dirt clings only to untreated areas.

secret: "Ludox" itself is very finely divided silica—several microns smaller than the tiniest grains of dirt. Applied to a clean ace, "Ludox" fills the microscopic pits and crevices where dirt ly collects and literally robs it of a home.

Du Pont announces new uses for SOIL-RESISTING LUDOX

COLLOIDAL SILICA

Research discloses new market opportunities for products based on "Ludox" to retard soiling of rugs, carpets, upholstery materials, paper, wallboard, painted surfaces.

Du Pont research gives the answer to the age-old problem of dirt and soiling. It's "Ludox" colloidal silica.

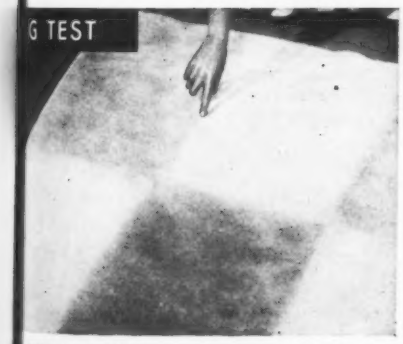
Odorless, colorless, and non-staining, "Ludox" is easily applied to any porous surface. It dries to form an invisible barrier against dirt. Treated surfaces stay clean far longer.

What does this mean in terms of new business opportunities for you?

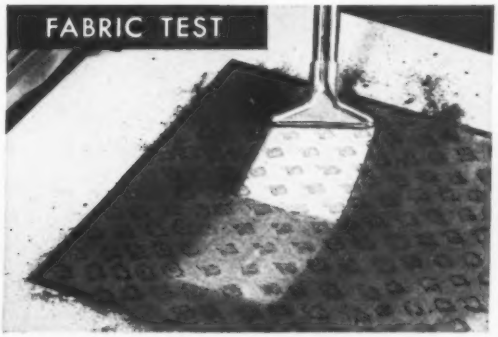
Already, products containing "Ludox" are appearing on the market for textile floor coverings, upholstery, drapes, Venetian blinds, lamp shades. Some preparations combine cleaning and anti-soil treatments in one operation.

What next? Some possible anti-soil uses of "Ludox" uncovered by research are shown on this page.

ow can you use this chemical that retards soiling on so many surfaces?



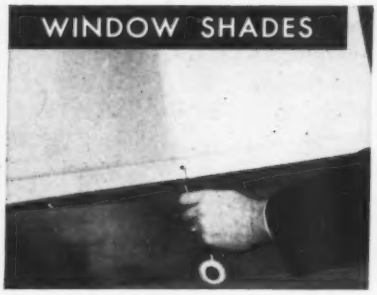
CKERBOARD EFFECT on rug shows where "Ludox" pplied in alternate squares. Dirt remains on un- ed areas after wear and normal vacuuming. ted sections keep their original fresh look.



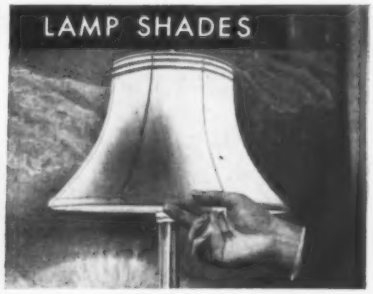
FABRICS RESIST DIRT when treated with "Ludox." Carpet sweepings rubbed into upholstery fabric are easily removed from treated half, but even vacuuming cannot remove same dirt from untreated area.

PAPER PRODUCTS benefit, too. Dirt brushed on wallpaper clings to untreated area when wiped with cloth. Treated section remains clean, colors as bright as new.

rnate slats shine; they're treated . . .



Half this shade had benefit of "Ludox" . . .



Entire lamp shade could have remained clean . . .

Dirt can't cling to X painted with "Ludox."

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"Backless" window of Crandall showroom facing busy downtown Binghamton street. Through window entire showroom back to office can be seen from street. Top right: Pegboard wall display near front of showroom is used for interesting display of brooms and brushes. Soap and paper dispensers and waste receptacles (bottom left) are mounted on pegboard wall display across showroom from brooms. Cash register has its own nook in showroom, bracketed by shelf displays.

Jobber "Shows and Sells"

By Albert S. Keshen

IN today's highly competitive selling the sanitary supply distributor with a modernized, attractive showroom has an immediate head-start over his rivals by mere physical appearance alone. A showroom sales area which imparts a feeling of expansiveness and openness invites people to come in and look around at samples displayed and engenders a strong psychological friendliness toward the presentation of products.

Long convinced of the value of this kind of an approach, Horace Crandall, owner of Crandall Supply Co. of Binghamton, N. Y., gave particular attention to his front sales area which formed an integral part of his modernization program. He has set up a display section which incorporates the latest modernization ideas for efficient, pleasant inspection of merchandise in a comfortable, well-lighted and ample environment. That the investment in time and expense has more than paid for itself is evident in the following benefits which he observed as a result of the move:

1. It's a strong selling aid for executives who walk in, and stimulates their questioning of products shown. They "open up" when they see the vast array of merchandise high-lighted all around them, thus giving salesmen an opportunity to begin their presentation in a favorable atmosphere.

2. In equal measure the salesmen, themselves, are affected by the attractive environment in which they are working; it boosts their morale, keeps them better informed on what's being carried by seeing the varied stock all around them.

3. It shows, by example, the advantages of a clean, spruced-up working area, thus exemplifying the highest standards of cleanliness and sanitation that the house is advocating through use of its merchandise.

Emphasis here is on display fixtures which show individual presentation of items without cluttering, and thus removing entirely

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any likelihood that some goods will be hidden behind others. This is achieved by widespread use of pegboard walls. The store modernization expert who designed the job, in using this material commented that "the beauty of it all is that you can change a display easily without having to knock holes in the wall. Even the girl in the office or the office boy can make the changes because it's so simple—you don't have to call a carpenter when you work with this material."

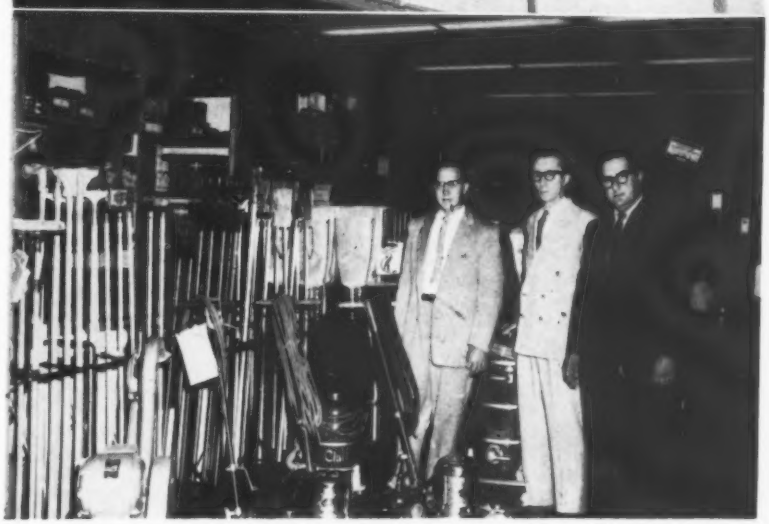
Thus on the right as one enters can be easily noted the heavy pegged-up display of brushes; while across the sales floor the same type of fixture is used to show the large and complete array of washroom fixtures and dispensers. Built-in shadow boxes show different sizes of brooms on board, giving size and bristle type.

Further along the wall are open racks for the cleaners, polishers, disinfectants, insecticides, etc., which are all identified by plastic department signs; the bottom part is made up of storage bins. Between this section and the front display so that it occupies the forepart of the area is the cash register in a recessed nook of pegboard wall space.

Well up in front are the brooms and mops in upright fixtures. Behind them is a large open display of industrial vacuum products, the sale of which the company is promoting. This showing is changed from time to time with samples of waste receptacles, mop equipment, floor maintenance materials, etc. which Crandall claims is the largest inventory of this stock in New York state outside of the metropolitan areas.

Behind this display is the partitioned-off-area for offices and the receiving department. This section is separated from the sales floor by frosted glass jalousies which permit those in the offices to look out into the showroom, yet afford privacy since those outside can't look in. Salesmen have a desk behind

(*Turn to Page* 185)



Horace Crandall, top, left, demonstrates floor machine as Clyde A. Miller, divisional manager for Clarke Sanding Machine Co., Muskegon, Mich., and Charles H. Hasper, factory representative for Clarke, look on.
Open side wall display (center) carries racks of germicides, disinfectants, floor maintenance materials, etc. Edward Frederick, general manager, left.
Brooms of all types, as well as the most modern mechanical floor maintenance equipment, are carried by Crandall. Showroom features different types of flooring to demonstrate how floor materials and machines actually perform.

She doesn't know what CARDIS ONE* is...

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The luster and lasting brilliance of her furniture and floors is a tribute to her own housekeeping . . . and to the skillful blending that has developed new wax-rich emulsions based on CARDIS ONE. This emulsifiable petroleum wax is the hardest on the market; is the *only* one, in fact, with Penetration One-Two. Combining CARDIS ONE with Cane Wax 700 and Warco 180 White produces emulsions that provide scuff-, soil- and water-resistant films of the highest gloss and durability. Formulae are simple and raw-material costs low.

CARDIS ONE (melting point 195°-200°F) is one of the many new waxes developed by Warwick to provide manufacturers with formulations that answer the growing consumer demand for wax-rich polishes. For facts about wax, come to Warwick. Samples, suggested formulations and technical service available—without obligation—by writing or telephoning to . . .

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Titre	130.1° — 131.4°F.	128.8° — 129.7°F.
Color 5¼" Lovibond Red	0.5 max.	0.7 max.
Color 5¼" Lovibond Yellow	1.5 max.	2.5 max.
Saponification Value	207 — 209	208 — 212
Acid Value	206 — 208	207 — 211
Iodine Value (WIJS)	1 max.	5.0 — 6.5

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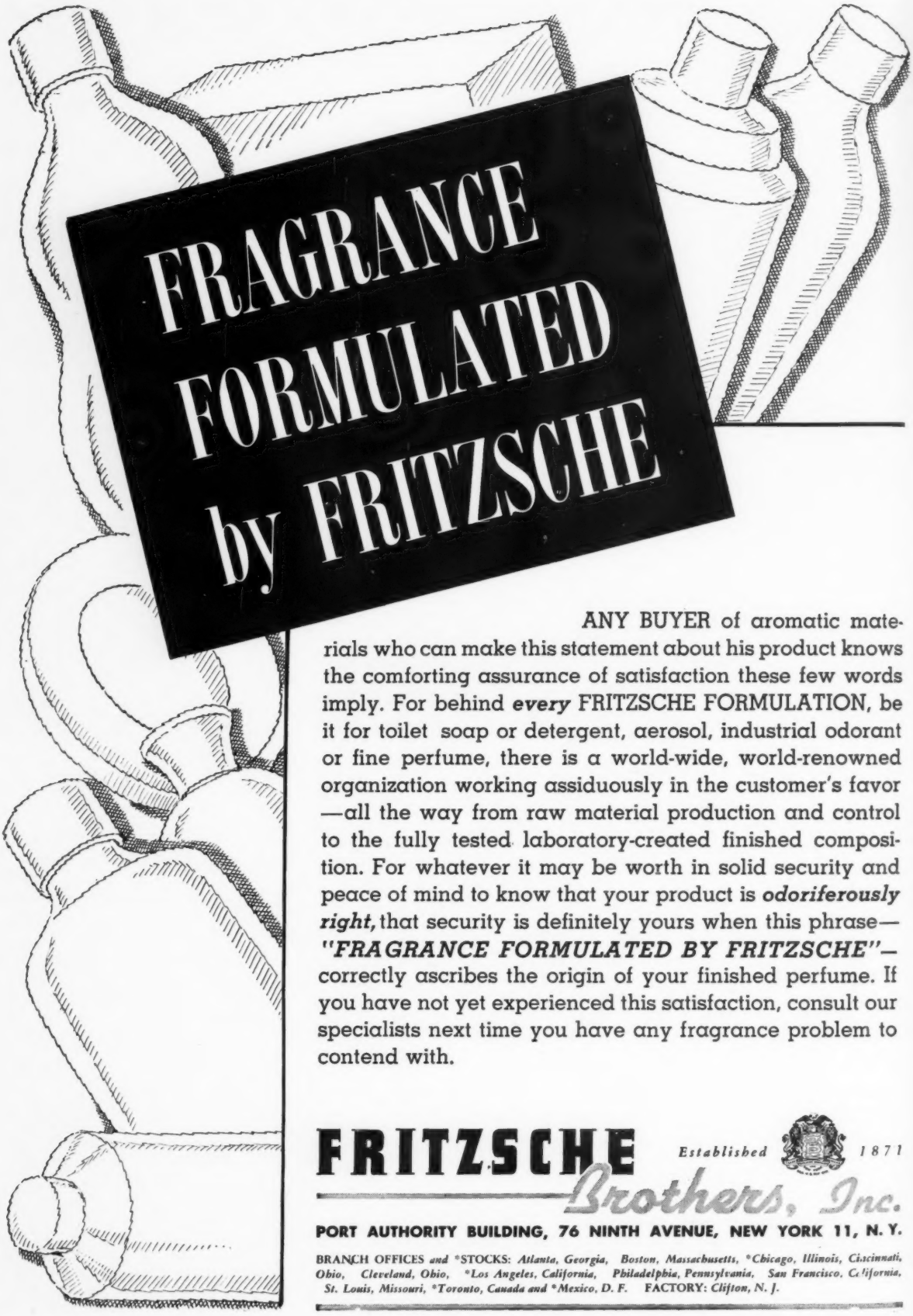

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Horace Crandall, owner of Crandall Supply Co., and an active member of the National Sanitary Supply Association, is shown seated at his desk.

the open wall racks, ample enough for use by two men, and having drawers that hold order baskets.

Before this improvement was effected, stock had been loosely arranged in steel racks or on conventional wood shelving. The change-over was made slowly, over a period of months, without disturbing operations. Now the transformation is so sharp that it can be considered almost startling, with consequent stepping-up of sales volume and a marked increase in turn-over of items which are highlighted on the floor.

The designer, in attaining his objective, emphasized the decorative elements of color, flooring and lighting. The color scheme features a combination of light and dark blue for the walls and shelving. Flooring in the demonstration area consists of red and white block combinations. Sections of different types of floor materials, such as parquet, asphalt and rubber tile are used to demonstrate the performance of floor machines on varying surfaces. The ceiling is of sound-absorbent insulation paneling.

Lighting comes from a combination of light and blue fluorescents with recessed, stream-lined fixtures to highlight the dark spots. Up in front over the windows overhead torpedo spotlights which can swivel completely around are adjusted to whatever floor displays need such light concentration.

The backless window which fronts on 77 State Street in the heart of the downtown business district enables anyone on the outside to look through the entire store clear through to the offices at the rear of the showroom.

This remodelled showroom, however, is only one facet of the firm's expansion program in observance of its 15 years in business. New lines have been added, more salesmen hired, the territorial scope expanded, and the entire promotional set-up given new zest.

Letterheads Redesigned

AN indication of this stream-lining, for example, is shown in the way the letterheads were designed so as to emphasize the extent of trading area served and the speed with which deliveries are made. Three colors: red, blue and black, are used for letterheads. On the left, in addition to the name and address of the firm, is a map of the Crandall sales area. It covers New York state west of the Hudson, across to Lake Erie, plus northern Pennsylvania for a total of 28 counties. Leading towns are place-named in blue, and the entire map is circumscribed with a red border. The top has a blue streak edge to indicate speed of delivery and service. On the back the localities served by Crandall are listed. It all makes up an outstanding background for correspondence.

In Crandall's expansion program, four new salesmen were added, making a total of nine, and a branch sales office was established at Jamestown, N. Y., at a point midway between Scranton and Wilkes-Barre, Pa. Salesmen are allocated territories and work on a salary and commission basis.

They are well indoctrinated and informed at monthly sales meetings which feature tape recordings of new product presentations as made by manufacturers. At these sessions the men are individually tested on their verbal deliveries and knowledge of products.

Adding New Lines

IN adding new lines, greater attention than ever before is placed on industrial vacuum equipment, particularly applications which although they have no direct relation to cleaning, emphasize insuring safety of floors and materials. Such products give the distribution picture the added element of safety, as well as sanitation.

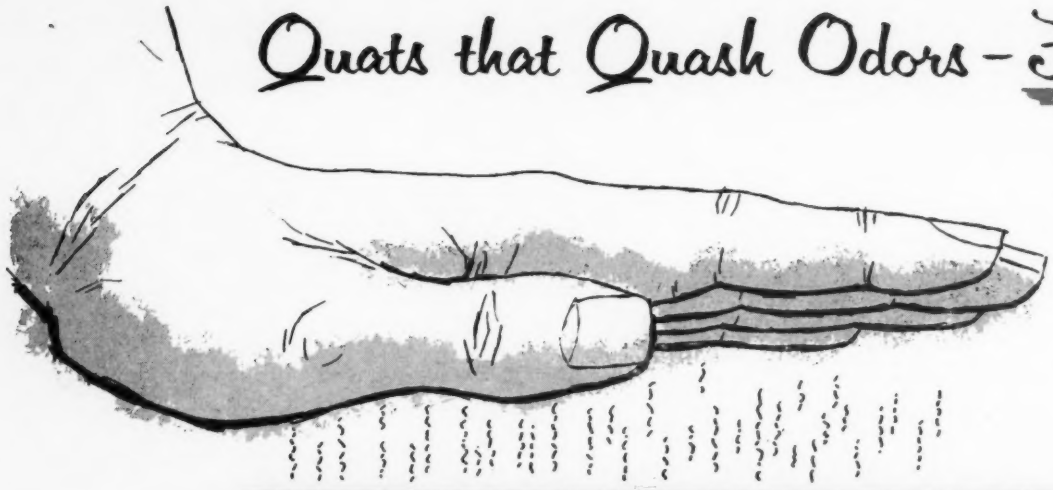
"An integral part of our sales approach is the offer of a complete building maintenance service which takes in every problem of the customer and shows him how we can solve them," said Mr. Crandall. "We make a scientific survey of his needs and then submit our recommendation. This kind of diagnosis is followed by a skill and service which few, if any of our competitors, can furnish. I might add that it's equal to that of the large chemical specialties manufacturers. When you go out of your way to that extent for a customer, he's bound to be impressed by what you can do for him."

On the other side of the distribution picture, Crandall is able to provide manufacturers with a complete package distribution offer, giving them a complete statement of where and how their products are going. By delivering such package coverage of its territory, the firm offers the producers a valuable sales aid, which explains why it has been able to garner so many valuable franchise privileges.

This attention to details is

(*Turn to Page* 215)

Quats that Quash Odors – Fast!



Emulsol's Deodorant *Aerosol* Duo!

Emcol E-11

for inanimate surfaces requiring odor-control at lowest cost.

Emcol E-607

for cosmetics, air deodorants and other skin and space application where low toxicity and low irritation to mucous membranes are essential.

new idea mart

from the **EMULSOL** *lab*

A thought or two about things new and interesting in the field of surface-active chemistry . . .

brass knuckles in velvet

The potent, germicidal, anti-odor action of velvet textured, gentle-on-the skin crystalline EMCOL E607 makes it a wonderful jack-of-all-sales-advantages in many cosmetics, proprietaries and sanitation specialties. Cation-active, it takes chlorophyll green, too. Can it go to work for you?

As advertised in CHEMICAL WEEK

Yes, here are two Emulsol quaternaries that really quash odors—fast. *Both* are highly efficient germicidal deodorants that are soluble in alcohol-propellent mixtures for quick action. *Both* are odor-stable when *aerosol-packaged* so that the sales benefits of better perfume oils won't be lost.

Emcol E-11. . . alkyl benzyl triethyl ammonium chloride (50% aqueous concentrate). Patent protected with U.S. Pat. No. 2,678,316.

Emcol E-607 . . . n(acyl colamino formyl-methyl) pyridinium chloride (crystals). Also patent protected, U.S. Pat. No. 2,189,664 . . . 2,290,173.

Samples for evaluation and technical literature available to aerosol packagers and formulators from your local EMULSOL technical representative, or from us directly.

EMULSOL CHEMICAL CORPORATION

a division of the Witco Chemical Company

59 EAST MADISON STREET • CHICAGO 3, ILLINOIS, U.S.A.

New Merchandising Service Aids In

Increasing Jobber Sales

"Service to Sellers" program of T. F. Washburn Co. calls for free advertising agency counsel to firm's customers in preparing new advertising and promotion material, including analysis of and suggestions for labels, catalog sheets, direct-mail & advertising.

By Ralph T. FitzSimons
Sales Manager
T. F. Washburn Co.

ONE of the editorials in a recent issue of *Soap and Chemical Specialties* pointed out that floor waxes are not considered the easiest commodity in the world to sell . . . a statement which many a sanitary supply distributor's salesmen would confirm with an emphatic "Amen!" And he would probably add that the same statement also applies to almost every other type of product in the floor maintenance category — such as cleaners, sealers, finishes and other protective coatings.

This selling problem, as *Soap's* editors also brought out, cannot be attributed to any lack of need or shortage of demand for floor care products. Floor maintenance supplies are obviously not "luxury" items or "specialties." They are necessities — as basic as the floor itself! Wherever there is a floor, a need exists for products to maintain and/or beautify it. Floor products are bought, used and "rebought" day in and day out, season after season, year after year. All of which should make the floor maintenance supply line a salesman's best friend . . . and one of the sanitary supply distributor's most reliable profit-builders, both in itself and as a "door opener" for sales of other products.

If the real-life situation falls short of this happy picture (and apparently it does,) it certainly seems somebody ought to do something about it! Tracking down the identity of that "somebody" requires very little talent in the Joe Friday department. All it takes is the answer to one simple question . . . Who Cares?

The distributor does, of course, for obvious reasons. So part of the responsibility for changing his floor line from a bugaboo to a best-seller rests on his shoulders. The average distributor, however, also has other types of merchandise to sell. He's losing money if he makes a stepchild of his floor maintenance department, but he probably won't lose his shirt. The manufacturer of floor maintenance supplies, on the other hand, can't shrug off the problem so easily. He has to sell his products or go out of business. And, unless he stirs up the stuff in the bathtub and sends his wife out to peddle it door-to-door, he has to depend on distributors to achieve the sales volume required to make his operation worthwhile.

So . . . in the final analysis, the biggest share of the responsibility for making floor maintenance products pay off falls right into the lap of the man who makes them. The seller has to exert a little effort, too . . . which he will gladly do for any line that has what it takes to put more profits in his pocket.

What It Takes

AND what does it take to make floor care products a profitable proposition for the man who sells them? . . . What kind of help from the manufacturer will actually produce sales results for the distributor?

First of all, the manufacturer has to get off the bench and into the battle. He has to talk things over person-to-person with his sellers and work side-by-side with them in the field. Accurate diagnosis is always the first step toward an effective cure . . . and the solution to any selling problem begins with a thorough knowledge of its cause.

One of the major factors affecting the floor maintenance sales picture, pointed out by *Soap's* editors in the editorial mentioned earlier and readily substantiated by

THE FLOOR IS YOURS, SIR!

. . . ANY floor and ALL FLOORS! . . . when you represent

TFW PROTECTIVE COATINGS!

NO DEBATE ABOUT IT! . . .

even the busiest, arguing-est buyer "yields the floor" and LISTENS when you count off all the benefits HE gets from this TFW *scientific* floor coating line! . . . developed through constant, highly specialized research in one of the world's finest *technical laboratories* . . . by America's most expert polymer and emulsion chemists!

- **LOCK-STEP anti-slip coating** . . . SAFEST floor-beauty insurance ever developed, as *proven* by actual UL tests!
- **DEEP LUSTER wax emulsion** . . . patented "exploded" emulsion. Outstanding spread, durability, water and streak resistance! Unharmed by freezing!
- **SURE-STEP collodial silica emulsion** . . . *first*—and *best*—combination of *DuPont "LUDOX" collodial silica* with ideal floor wax qualities.
- **FLOR-FILM wax** . . . super-hard, almost indestructible vegetable-wax synthetic-resin blend.

PUT THE TFW FLOOR MAINTENANCE "CREW" TO WORK FOR YOU!

Make EVERY floor a PROSPECT with the one *best* answer to every need!

Make every prospect a PERMANENT customer with a floor line that RE-sells itself!

TFW SEALERS and FINISHES

- ALL-AMERICAN GYM FINISH
- SUPER ALL-AMERICAN GYM FINISH
- CONCENTRATED SEALER-FINISH
- FLOR-CO SEAL
- FLOR-CO FINISH
- CONCENTRATED FLOR-CO SEALER-FINISH
- TREAD-PROOF FLOOR SEAL
- PENETRATING SEAL
- CRYSTAL SEAL
- COLOR SEAL

- ALL-AMERICAN STRIPPER
- CLEAR-LITE ANTI-DUST OIL

TFW CLEANERS

- DEEP-TONE LIQUID CLEANER
- CONCENTRATED DEEP-TONE LIQUID CLEANER

* . . . and **NOW!** A NEW, UNIQUE **TFW** SERVICE!

FREE! Beginning right *now*, the CREATIVE FACILITIES of TFW's are *yours* for the asking! . . . to help you prepare advertising, sales promotion and selling tools that will guarantee TOP profits from your TOP quality TFW line!

TELL US MORE! . . . about TFW's sensational new "SERVICE-TO-SELLERS" program!

Buyer's Name_____

Firm_____

Address_____

City_____ Zone_____

State_____

S95

GET ALL THE FACTS!— FAST!

T. F. WASHBURN Company

Manufacturers of Quality Paint Components and Floor Finishing and Maintenance Products since 1886

2244 ELSTON AVENUE, CHICAGO 14, ILLINOIS

Warehouses: Los Angeles • San Francisco • Denver • Seattle • Atlanta • Dallas

acutal experience at the sales front, is "too many of everything." In this field, more than in any other, the number of product variations and different brands available for any given purpose is so great that the buyer can hardly count them — and couldn't even begin to test and compare them. As a result, both the p.a. and the actual user of the product tend to play it safe and stay "married" to a brand he's always used, or one recommended by the distributor from whom he gets most of his other sanitary supplies.

Another reason for this "closed-mind" attitude on the part of many buyers is the suspicion created by the fact that variations in quality are almost as great as the number of brand names. Floor maintenance supplies are, to a great extent, a "pig in a poke." Two products may look pretty much alike — and be miles apart in quality. Technical listings of ingredients and percentages mean little to the average small buyer . . . and the large buyer hasn't got time for tests and analyses. So there's a general reluctance to change — because it's "too risky" or "too much trouble." There may be better products available, but many buyers just aren't taking any chances.

Seeing little future in bouncing his skull against this barrier, the distributor's salesman may be tempted to toss the whole floor maintenance field up for grabs and save his selling efforts for lusher-looking profit pastures. This is understandable, but unfortunate . . . because it takes a heap of one-shot sales to match the long-range potential of an established floor maintenance account.

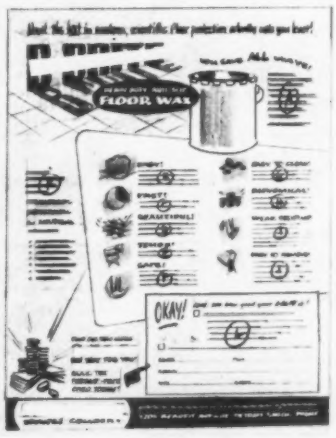
The most important thing about this situation is the fact that it provides the clue to the manufacturer's primary responsibility to those who sell his wares . . . and that primary duty is to provide his sellers with floor maintenance products of consistently high quality, products which the seller can offer to his customers with absolute confidence that they will fulfill the customer's requirements and guarantee his satisfaction, good will and future business.

With products of this calibre, the quality of which he can guarantee to his customers, it is up to the distributor to make profitable use of them.

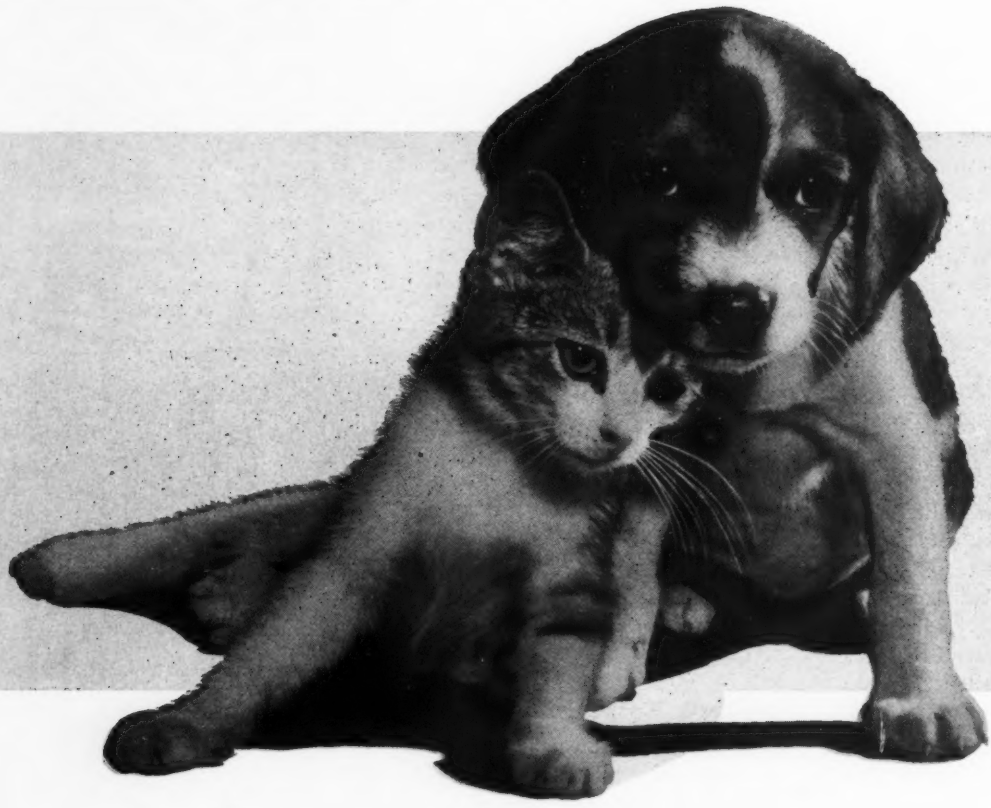
Jobber's Responsibility

TO do this, he must be equipped with a thorough technical knowledge of the product, of scientific floor care in general and of each

Redesigning labels, such as the rough shown at far right, or designing new or improving older self-mailers is part of the service Washburn is offering its distributors. The firm's agency worked out the designs shown below. At extreme left, from top to bottom, are first, second and back panels of self-mailer, center spread of which is shown in center.



Compatibility is not a problem when you specify GIVAUDAN



Out of long experience in fragrance materials and in adapting them to a wide variety of products of varied uses and methods of application, Givaudan has successfully solved many problems regarding the compatibility of the essential ingredients.

Should you experience a difficulty stemming from incompatibility of materials, we may be able to offer a ready solution. Our staff of chemists and perfumers will welcome the opportunity of working with you in finding the best answer to this sometimes troublesome problem. Your inquiry will receive our prompt, considered attention.

GIVAUDAN

Better perfume materials through constant research and creative abili

GIVAUDAN - DELAWANNA, INC.
330 West 42nd Street · New York 36, N.Y.

Branches: Philadelphia · Boston · Cincinnati · Detroit
Chicago · Seattle · Los Angeles · Toronto

customer's individual needs in particular . . . and he must be able to utilize this knowledge to serve the customer best and win his confidence. In floor maintenance, to an even greater degree than in other fields of selling, the "fast pitch artist" is a thing of the past. Today's salesman of floor care products must be an expert and a teacher. He must be able to provide his customers with complete, accurate information about his products, what they will do and how to use them for best results . . . and he must be prepared to advise and recommend the proper floor care method for each of the many types of floors in use today, according to each customer's particular traffic requirements, type of business, etc.

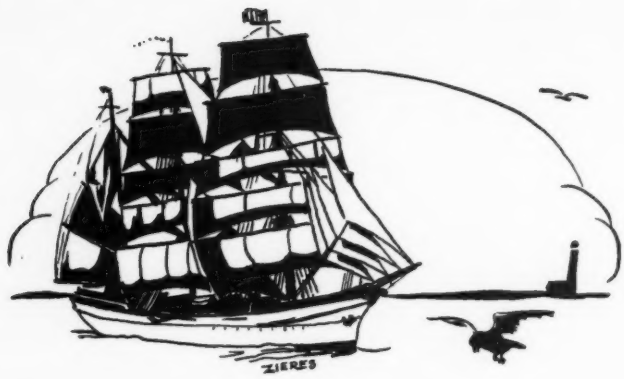
Much of the information and knowledge required to make a good floor maintenance salesman is available through trade magazines and technical publications. But here again, a large share of the burden rests with the manufacturer, who must provide all the specific information the distributor and his men need to know about his products, what they will do, when they should be used and how. To help them be of real assistance to the customers they serve, the manufacturer must place his laboratory facilities and technical staff at their disposal—for the solution of specific questions and problems, advice on unusual requirements, etc.

New and old, top and bottom, respectively. Improved label designs, such as that shown in upper right, are part of newly introduced service for customers of T. F. Washburn.

Given a line of reliable, high quality products and armed with adequate technical information, the distributor is ready to go to work on the big challenge . . . cracking through the multiple-brand barrier and creating the opportunity for his men to make sales and build permanent floor maintenance accounts. To do this he must have advertising, merchandising and sales promotion tools . . . and the stiff competition in the field makes it essential that those tools be powerful enough to do the job.

The rare combination of marketing knowledge, technical information, merchandising know-how, selling experience and creative skill required to plan and prepare sales tools capable of producing results in floor maintenance is not always readily available to the individual distributor. Consequently, it becomes the responsibility of the manufacturer, whose existence depends on the success of those who sell his products, to help them as much as possible in securing the high-calibre sales tools required to establish demand for his line . . . and to make possible that all-important initial sale which will give his product a chance to prove its quality and set the stage for repeat business.

In addition to improving old labels and designing new ones, changes in arrangement and wording of copy and use instructions on labels are made to increase salability of product.



Since the Days of the "Clipper Ship..."

Soapers have depended on WH&C ...for Raw Materials of Quality

SINCE 1838, we've been supplying the nation's "soapers" with basic raw materials.

CHECK YOUR NEEDS FROM THIS LIST

VEGETABLE OILS

Babassu, Castor, Cocoanut, Corn, Cottonseed, Olive, Palm, Peanut, Sesame, Soybean

ANIMAL FATS

Sperm Oil, Oleo Stearine, Lard Oil, Neatsfoot Oil, Grease, Tallow, Lanolin

FATTY ACIDS

Red Oil, Tall Oil, Tallow
Stearic Acid
Hydrogenated Fatty Acid
Cottonseed and Soybean Fatty Acids

ALKALIES

Caustic Soda, Solid, Liquid, and Flake; Soda Ash, Light and Dense
Carbonate of Potash, calcined and hydrated
Calcium Chloride
Tri Sodium Phosphate
Tetra Pyro Phosphate
Quadrafos Granular and Beads—a stable polyphosphate for water conditioning and mild but effective detergency.

SILICATE OF SODA—Liquid powdered and solid.
METSO* 200—(Sodium Orthosilicate)
METSO* ANHYDROUS—(Anhydrous Sodium Metasilicate)
METASILICATE—"Metso"* Granular.
METSO* DETERGENTS—55, 66, 99.
MAYPONS—Unique surface active agents; prolific foam; high detergency and emulsifying powers; suitable for cosmetic and industrial use.

AIR DRYETTES • **CHLOROPHYLL**

*Reg. U. S. Pat. Off., Phila. Quarts Co.

Let us mix your dry private formulas

Established 1838

Welch, Holme & Clark Co., Inc.

439 WEST STREET, NEW YORK 14, N. Y.
Warehouses in New York and Newark, N. J.

Different styles of labels, and labels for different products of the same manufacturer are available. Emphasis on close family relationship of products is stressed.

Until now, very little has been done along these lines. The average distributor is often groping in the dark in any advertising and merchandising efforts he does make . . . and, in many cases, the money he spends for sales tools that just don't have what it takes to make an impression is just so much coin down the drain.

Recognition of this general lack of adequate selling tools as one of the most important "missing links" in the floor maintenance sales chain was the major reason behind the development of the new "Service to Sellers" program recently introduced by T. F. Washburn Co.

Most unique feature of this new program is the special arrangement through which the creative facilities of Washburn's advertising agency are being made available to sellers of the company's floor maintenance products—at no cost. In addition to helping customers plan and prepare new advertising and promotional material, the program also provides a "clinic" service to analyze previous material prepared by the customer and suggest revisions to increase its effectiveness.

Label Design

FOR example, one of the first "tools" to be considered in building increased acceptance for any product or line is the label, which should be attractive and distinctive enough to make a definite—and favorable—impression on the user's memory . . . so that he sees that particular label in his "mind's eye" the moment he thinks of that type of product. In addition, the label of every floor maintenance product has an informational and educational function. It should tell as clearly and simply as possible, exactly how to use the product in order to insure best results. The label that fails in this respect can be the cause of poor results (through improper use) that place both product and distributor in a bad light. And, of course, the name and purpose of the product, as well as the name of the manufacturer or distributor should be prominently and attractively displayed. In addition, all material on the label should be logically arranged for easy reading and eye-appeal.

About 90 percent of the labels being used by institutional distributors already submitted to the program's "clinic" for revamping are about fifty years behind the times! Many of the illustrations look like something left over from Grandma's scrapbook, reading matter is all tossed into one big, confusing chunk, directions are not as easy to follow as they should be, etc. In most cases, the application of a little streamlined design—in both copy and layout—works wonders in bringing these fellows up to date and giving them the modern, "quality" look that inspires customer confidence and increases the product's prestige.

Another basic tool that frequently needs some "doctoring" in order to improve its visual appeal and make it do a more effective job is the all-important catalog sheet. Here, as in other forms of promotional material, the most important selling points of the product are all too frequently buried in a hodgepodge of miscellaneous data. If the catalog is to serve its purpose—both as a selling guide for the salesman and a buying guide for the customer — the big features of each product should pop right out at the reader without the need of a reading glass. Major benefits can often be put across most effectively in illustrations or sketches; showing the product in use is often more meaningful, in the case of maintenance supplies especially, than a cut of the package alone.

Designing trade publication advertising for the distributor who utilizes these media is another function of TFW's new service. Here, again, streamlined simplicity—plus straightforward copy that puts the emphasis where it sells—can make the difference between an advertisement that pulls inquiries and makes sales and one that falls flat on its face. One elementary principle that's often overlooked, for example, is the fact that a technical dissertation on the product's ingredients, chemical composition, etc., may mean very little to the average reader. He wants to know the answer to one question . . . what's in it for me?

Direct Mail

DIRECT mail advertising is another form which can prove profitable for the floor supply distributor in several ways. In addition to serving as an "extra salesman" and pulling in mail orders from new customers, it can serve as a re-order reminder for the salesman, laying the groundwork for and

(*Turn to Page 225*)

UL Lists Hydraulic Fluid

"Pydraul F-9", a fire-resistant synthetic hydraulic fluid made by Monsanto Chemical Co., St. Louis, is the first such to be listed by Underwriters' Laboratories, Inc., Chicago, according to a recent announcement by Monsanto's organic chemicals division.

Following more than a year of UL flammability tests, the fluid has been given a fire hazard rating of 2-3, "much less flammable" than petroleum oil. The rating is based on UL's standard of classification for fire hazard of liquids in which ether is rated 100, gasoline 90-100, ethyl alcohol 60-70, kerosene 30-40 and paraffin (petroleum) oil 10-20.

Developed by Monsanto in 1950, "Pydraul F-9" is a stable, non-corrosive fluid which, in addition to its extreme fire resistance, provides a lubricity equivalent to that of premium-grade petroleum fluids. It is used in hydraulic equipment operated near heat or other potential ignition sources, particularly in die-casting and in a wide variety of steel industry applications.

— ★ —

Breuer Names McMillen

William R. McMillen has joined Breuer Electric Manufacturing Co., Chicago, as regional sales manager in the southeastern United States, it was announced recently. With headquarters in Atlanta, he will be in charge of sales of the "Tornado" line in Florida, Alabama, Georgia, North Carolina, South Carolina, and eastern Tennessee.

— ★ —

Rubber Floor Sales Rise

Sales of rubber flooring during the first quarter of 1955 are up five percent over the comparable period of last year, it was announced by the Rubber Flooring Division of the Rubber Manufacturers Association. This increase is largely due to the growing trend to resilient floor coverings in the home, according to C. P. McFadden, division chairman. Another factor has been the post-war boom in commercial and institutional building.

FOR many years chemists have been searching for a wax that would form clear, transparent emulsions with nonionic emulsifiers.

The advantage of nonionic wax emulsions is that they are much more compatible than conventional anionic formulations. This is especially important because of today's trend in using many different types of resins, polymers and other additives. Furthermore, many surfaces such as rubber tile, asphalt tile and leather may be adversely affected by the alkalinity and reactivity of anionic compositions.

Nonionic wax emulsions are generally considered to be far more resistant to temperature changes, especially freezing. They can be combined with a wide range of organic dyestuffs, where heretofore the chemist was limited in his choice of colors.

NOW the hard, high melting **DUROXON H-III** Wax is available in any quantity to produce nonionic and anionic dry-bright emulsions of outstanding performance. **More slip-resistant too!**

TRY DUROXON H-111 WAX AND SEE FOR YOURSELF!

Exclusive Importers and Distributors

dura COMMODITIES

DURA COMMODITIES CORPORATION

20 Vesey Street, New York 7, N. Y.

Telephone: DIgby 9-2570

SYNTHETIC WAXES
CHEMICAL PRODUCTS

Silicone Polishes

(*From Page* 165)

sides methyl are attached to the silicone atoms. The organic groupings may be ethyl, phenyl, vinyl or combinations of each.

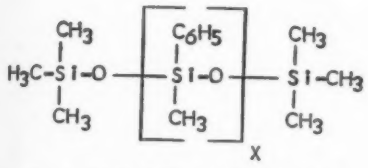


Fig. 2. Methyl Phenyl Silicone Oil

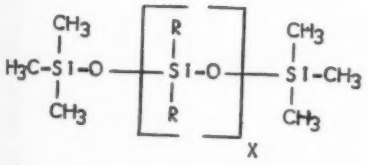


Fig. 3. General Silicone Oil Formula

It now appears that silicone oils are taking their place along with other polish ingredients as necessary, beneficial and truly useful ingredients in polish formulations. The silicones have contributed significantly to the vast improvements made in polishes over the last five to six years. The polishing tasks of the consumer are no longer the time-consuming burden they once were. There is every reason to believe that, with continued cooperation between polish manufacturers and silicone producers, even greater advances can be made in the years ahead.

—★—

New Concrete Sealer

A new sealer-finish for use of cured or uncured concrete and other masonry type floors was introduced recently by S. C. Johnson & Son, Inc., Racine, Wis. "Conq-r-Dust" is claimed to provide good gloss, to be water-resistant, slip-retardant, and nearly odorless and colorless. The product is applied straight from the container to a new concrete floor after it has been swept or vacuumed, to an old floor after a thorough cleaning. One coat dries in 30 minutes, a second coat is suggested if the floor is extremely porous. The floor can be maintained by mopping with a weak cleaning solution. Wax or paint can be applied over the sealer and resilient floors can be laid over it.

—★—

Du Pont Advances Two

Thomas J. Desmond has been appointed Chicago district sales manager of Grasselli Chemicals Department, E. I. du Pont de Nemours & Co., Wilmington, Del., it was announced last month. He succeeds W. James Latimore, who moved to Wilmington on special assignment.

Mr. Desmond had been Boston district sales manager since 1951. With Grasselli since 1935, he has held posts as production supervisor and as a member of the sales organization.

Chicago district sales manager since 1952, Mr. Latimore joined the Grasselli sales division in 1936, and has been assistant district sales manager in Cleveland and district sales manager in Houston.

As the Reader Sees It

(*From Page* 39)

avoided if the attitude which you express (Edit. July, 1955, S & CS, page 33.) was more generally held.

The purpose of the advertising campaign (by Steel Shipping Container Institute on behalf of new drums)—contrary to public belief—is not to discontinue the use of reconditioned drums, as new drum manufacturers are quite well aware of the importance of reconditioned drums in the continued use of steel packages.

It is because a used drum has a resale value up to $2.00 or $2.25 that makes the average cost of a new drum far less than it would otherwise be, and far more competitive than other types of packaging.

The sole purpose of the advertising campaign is to eliminate the abused and over-used drums which should have long been discarded, and the continued use of which gives steel packaging of all types a black eye in the eyes of users and transportation authorities.

If our campaign serves to eliminate just these potential sources of difficulty, it will have proven to be worth-while. Your assistance in pointing up the unsatisfactory nature of battered, disreputable containers will be helpful in accomplishing our ends.

ROBERT J. GREENBAUM,
Vice-president in charge of sales,
Inland Steel Container Co.,
Chicago.

—★—

Foil Wrapped Soaps

Editor:

We note with interest in the July issue of *Soap & Chemical Specialties* in the "Packaging Notes" section on page 89 that you call attention to the gold foil wrapper now used by "Lux Toilet Soap." You state in the article that "Lux" is believed to be the first and only popular-priced American toilet soap to adopt a metallic foil wrapping.

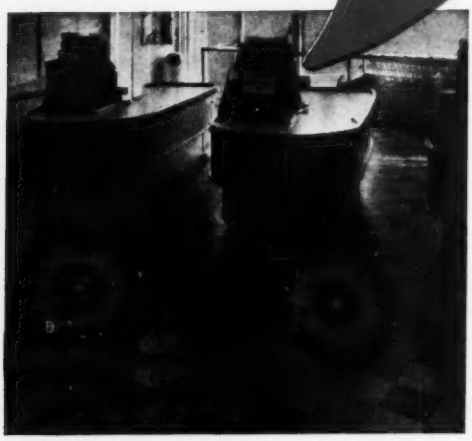
We believe that you would be interested to know that "Creamade Soap," manufactured by Wilson & Co., was the first American-made toilet soap to use a gold-foil wrapper. While not as widely distributed or advertised as "Lux," "Creamade Soap" has been distributed or advertised in the Southeastern section of the United States since January, 1954, when it had the distinction of being introduced as the "only deodorant and cold cream soap on the market," and the only one wrapped in gold foil.

Frankly, we are complimented by the fact that other manufacturers have followed the lead of Wilson & Co. in improving the appearance of their product, and are interested to know that others are considering following the pattern that we established.

We knew that you would be interested in the facts.

"Creamade Soap" is widely distributed in supermarkets, food, variety, department and drug stores throughout the Southeast, and is available in two sizes: regular and bath. Prices are approximately two cakes of the regular for 25 cents and 35 cents for two bath size cakes.

NEW!
DUST CONTROLLING ACTION
cuts sweeping time 50%



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Faster, more efficient — non-slip Buckeye DY-DUST protects floor surfaces, controls dust-borne microbes and safeguards health. Scientifically controls dust and dirt on wood, terrazzo, tile, concrete, vinyl, rubber, marble, cork and composition floors.

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90% distills within range of 7° C., which betters Pharmacopoeia requirements.

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Wilson & Co. has scored many "firsts" and we are rather proud to have been first in this particular development of soap packaging.

T. J. Dunne,
Grocery Products Division,
Soap Department,
Wilson & Co.,
Chicago

* * * *

To Mr. Dunne and Wilson our apologies. We should have known better, particularly since we published a photograph of Wilson's "Creamade" soap on page 49 of the February, 1954 issue of SOAP. *Elsewhere on this page we show "Creamade" in its gold foil wrapping. According to* MODERN PACKAGING *in its August issue, J. Eavenson & Sons, Camden, N.J., division of Wilson, is generally credited with the first known use of aluminum foil for toilet bar soap.—Ed.*

"Creamade" soap of Wilson & Co., Chicago, believed to be the first metallic foil wrapped soap in the popular price field. It was introduced and sold in the Southeast early last year.

—★—

Transparent Soaps

Editor:

In the August, 1954, and June, 1955, issues of *Soap & Chemical Specialties* you published interesting articles about transparent soaps.

In the July issue, page 39, in the second part of the article by Wells on transparent soaps the following statements are made: "A really good soap of this class should be translucent almost to the point of sheer transparency . . .," and on page 40, "only one of French origin has approached, in this vital matter of transparency and coloration, the high standard set by 'Pears' soap. . . ."

Are you referring to "Pears Transparent Soap" of A. & F. Pears, Ltd., England, a sample of which I am sending with several cakes of transparent soap made by my firm?

I am a chemical engineer and have been manufacturing transparent soap. I am interested in knowing more about transparent soaps and would like to learn the names of other firms that make milled transparent soap with high fatty acid content.

The information I have been receiving and data based on my own research shows that transparent soaps have a bright future because they can be made cheaply and with a high fatty acid content such as ordinary milled soap. The small crystals of transparent soap provide better washing qualities than other soaps of the same composition.

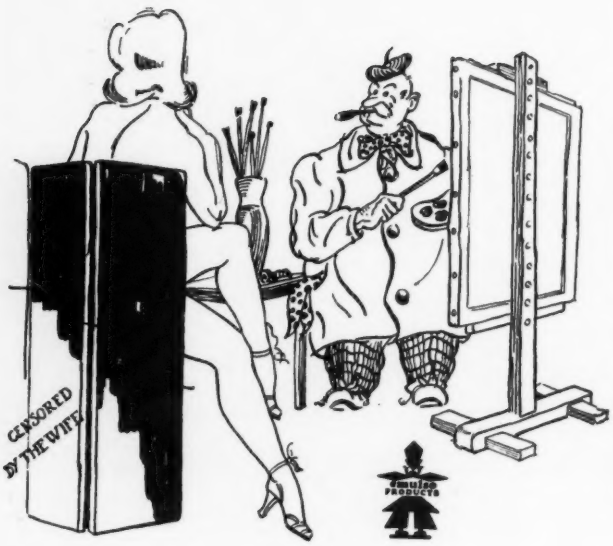
The transparent soap I am manufacturing under the name "Select" sells in Canadian department stores for 25 cents per cake.

T. Dumas, Plant Engineer,
Universal Soap & Perfume Co.,
London, Ont., Canada

* * * *

In answer to Mr. Dumas' first question, the "Pears" soap referred to in the article and the sample he sent us are the same famous "Pears" soap. Secondly, we will be glad to contact the author and others in the industry for further information regarding firms making milled transparent soap with high fatty acid content. Elsewhere on this page we reproduce a photograph of a cake of transparent soap made by Mr. Dumas. It is a fine looking product.—Ed.

"Select" transparent glycerine soap of Universal Soap & Perfume Co., London, Ont., Canada, which retails in Canadian department stores for 25 cents per cake, wrapped in individual cellophane envelope.



We have designed ... and are manufacturing ... the darndest general purpose cleaner you have ever seen or used - and at a price that is astonishing ... LOW THAT IS ...

This is our first attempt with this type of solicitation but our know-how dates from 1912.

CLEANS - IT - CLEANER

can be used safely on any surface on which water may be used, is economical, use strength sixteen to one, packaged in ones, fives, thirty and fifty five gallon drums.

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Floor Care is mostly labor cost.

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Reduce Man-Hours!

Cuts Clean-up Time in Half

BIG X Sweep Mop

Here's a mop that snatches up dust on contact. And it's amazingly durable... lasts and lasts. Can be removed from block for washing. Handles can't break due to exclusive new, rugged "Gibraltar" brace... BIG X comes in various widths up to 5 feet!... It's our leader!

VICTORY Wet Mop

Your maintenance men will cheer you for ordering VICTORY mops. Soak up dirt and water at high speed. A heavy-duty, long-wearing mop — the choice of thousands of buyers.

HOLZ-EM Applicator

A high-speed performer. Reduces cost of applying wax, seals, varnish. More professional floor finishers use HOLZ-EMS than any other applicator.

Jobbers When you sell AMERICAN STANDARD mops you build sound, repeat business. Ask for catalog and prices.

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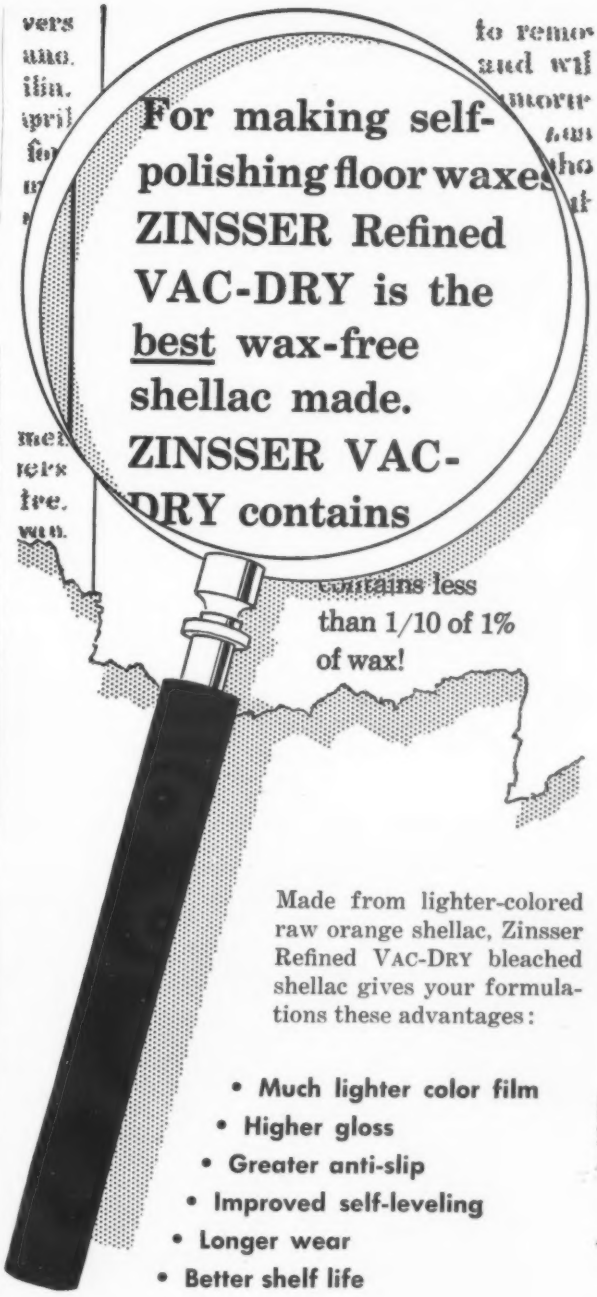
For making self-polishing floor waxes ZINSSER Refined VAC-DRY is the best wax-free shellac made. ZINSSER VAC-DRY contains
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Low acid value. Takes *less* alkali to go into solution for *greater* water resistance. Dissolves readily. Makes unusually stable aqueous solutions.

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scents mean

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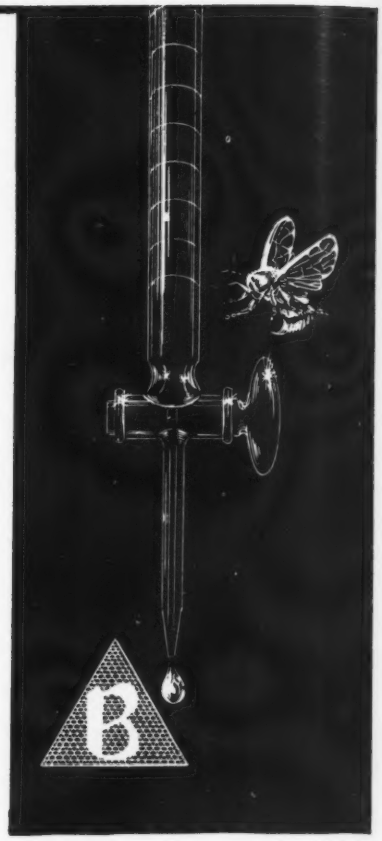

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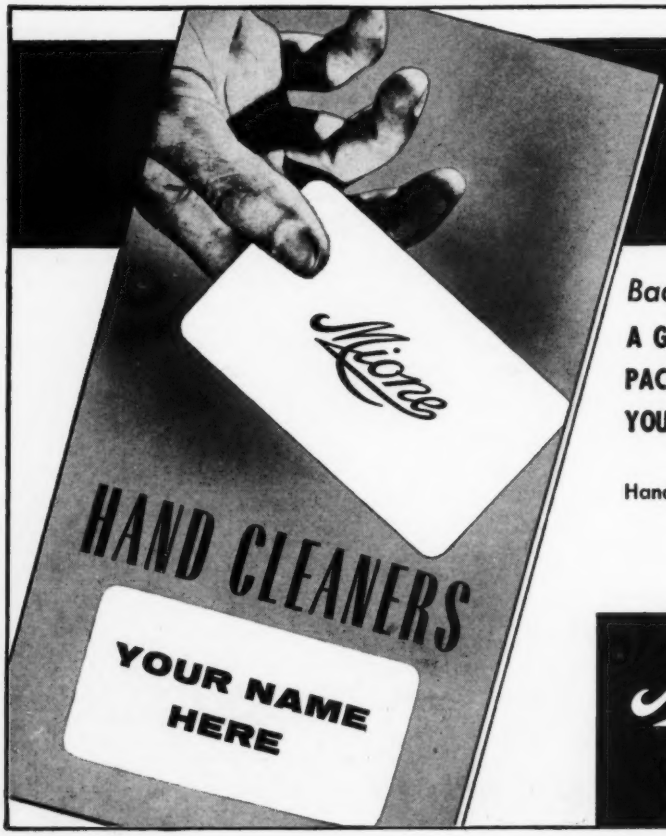

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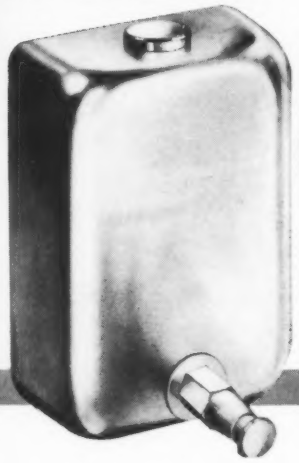

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Heavy gauge steel tank, triple plated . . . copper, nickel and the brilliant polished chrome finish. It holds 40 ounces . . . enough to serve up to thirty people for a full busy month.

Has the famous Moore Brothers valve . . . Neoprene washer equipped. No leak . . . no drip . . . no clog; and features the Moore theft-proof lock-top cap. Easy filling, of course. Takes only minutes to install with the new hidden wall bracket.

Your customers will welcome this beautiful heavy-duty and completely efficient dispenser. Users will keep it busy, which means more and more soap sales for you.

Also available with Moore's new lather valve, Model No. 550-C . . . and Moore's new lotion valve, Model No. 550-CL.

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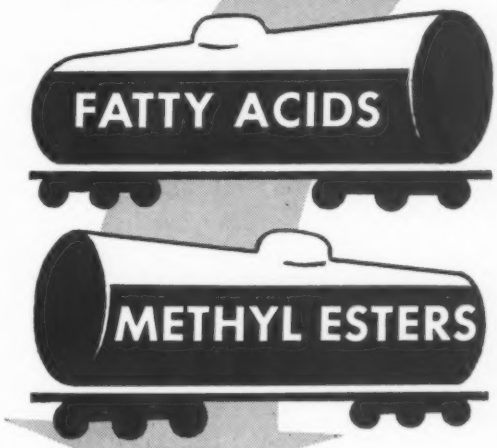
Quality-proven Soap Dispensers and Dispensing Equipment

EL DORADO COCONUT OIL



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El Dorado has specialized in coconut oil products for more than half a century. That's one big reason why you can depend on the performance of El Dorado products in your formulations.

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WHEN YOUR CUSTOMERS SAY:

"I want floor sweeps that last longer and save me money..."

. . . sell them on OXCO

Master Blend Floor Sweeps

PROVEN TO LAST 3 TIMES LONGER

Unretouched photo shows an all-hair sweep (left) and OXCO "Master Blend" sweep (right) after continuous 500-mile sweeping test by an independent research laboratory. Notice, the SARAN-horsehair blended filling is worn only ⅓ as much as the all-hair filling . . . did not mat at all.

AND, FLOOR SWEEPS ARE ONLY A STARTER

The sales power of "Master Blend" Floor Sweeps is a natural "toe-in-the-door" that'll help you sell the full OXCO line of maintenance brushes—sweeps, dusters, radiator brushes, window brushes—all "Master Blend" filled . . . *plus* a fine line of quality bowl brushes, both twisted and wrapped in wire.

Easy, immediate sales . . . and better-satisfied customers mean greater volume and higher profits for you. Start now . . . get the whole story from your OXCO Representative, or write direct for Catalog No. 53 and Current Jobber Price List, with specifications and prices on the complete "Master Blend" line.

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Industrial Soap Products Since 1896

59 Years of Research and Manufacturing Experience Assure Superior Quality and Service

SYNTHETIC SUDS POWDER is a high sudsing synthetic detergent (aerated) similar in appearance, alkalinity and pH of quality soap powders. Produces strong, stable suds, prevents scum formations and, rinses quickly.

TRISOAP is a complete laundry powdered soap. Gentle to hands and on fabrics—tough on soil and competition. Rich lasting suds — even in hardest water.

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NAMICO "447" . . . an outstanding dish and glass cleaner for hand use. Efficient in the hardest water. Leaves surfaces sparkling, streakless and film free. (Sudsing.)

PROTEXAL . . . a *sanitizing* detergent for hand use. A Public Health safeguard which washes and sanitizes in one operation. For glasses, dishes, silverware, dairy and food processing equipment. (Sudsing.)

Namico

NATIONAL MILLING & CHEMICAL CO.

PHILADELPHIA 27, PENNA.

News

N. Y. Office for MGK

The opening of an eastern office was announced last month by McLaughlin Gormley King Co.,

Nathan D. Froot

Minneapolis. Located at 21 East 40 Street, New York 16, the newly created branch is managed by Nathan D. Froot. Mr. Froot was previously associated with Pesticide Advisory Service and Propel Chemicals, Inc., of New York.

The New York office supervises sales in New England, New York, and the Middle Atlantic areas. Harry W. Gaffney continues to represent the firm in Philadelphia and Baltimore.

—★—

Cowan a Bobrick V. P.

Election of Arnold A. Cowan as vice-president of Bobrick Dispensers, Inc., Los Angeles, was announced recently by A. L. Bobrick, vice-president and treasurer. Associated with the firm since 1952 as chief engineer, Mr. Cowan now has complete charge of manufacturing and engineering.

Mr. Bobrick, son of the late G. A. Bobrick, who founded the firm in 1906, continues his activities in the experimental development of new products and specialty sales. Other officers reelected are: William S. Louchheim, president; James A. Puleo, vice-president, eastern division; James E. Pollak, vice-president, sales; Leona M. Wickham, secretary; and John R. Lamb, assistant secretary and treasurer.

—★—

New Tykor Cleaner

A new cleaner-sanitizer for the food handling industry was introduced recently by Tykor Products Division, Borden Co., New York. The product employs the germicidal properties of iodine while eliminating its corrosive effects, according to Russell Puhle, general manager of the division. "Safe-Gard" is claimed to be free rinsing, leaving no film, stain or deposit. It is said to prevent milkstone and to be unaffected by hard water. The product is effective in cold water. Its yellow color acts as a strength indicator.

—★—

New Velsicol Venture

Velsicol International Corp., C. A., was formed recently by Velsicol Corp., Chicago, to handle the latter's foreign trade activities. Main offices of the new and separate company are located in Chicago, with a branch office in New York. E. T. Collinsworth, Jr., is president of Velsicol International while retaining his post as vice-president and general manager of the parent company.

The new company assumes responsibility not only for foreign insecticide sales but will also be concerned with the marketing of the other Velsicol products outside the United States.

E. T. Collinsworth

—★—

McCotter in New Post

Kenneth H. McCotter has been advanced to the position of factory manager at the Bloomfield,

Kenneth H. McCotter

N. J., plant of Lehn & Fink Products Corp., New York, it was announced recently by Edmund J. Dempsey, general manager of manufacturing.

Having joined Lehn & Fink in 1948, Mr. McCotter became assistant factory manager in the same year and production superintendent in 1950. In 1951 he was appointed production manager, a post he held until his recent advancement.

In his new position Mr. McCotter supervises manufacturing operations, including planning, scheduling, plant purchasing, inventory control, industrial engineering and maintenance.

—★—

Carnauba Specifications

Specifications for genuine pure carnauba wax were issued recently by the American Wax Importers and Refiners Association. Covered are yellow, fatty and chalky types. Brazilian and corresponding American designations for types and grades are listed and compositions, properties, and constants are given. Specifications and the test methods on which they are based are available on request from the association at 36 West 44th Street, New York 18.

* it's tough

FRANKLIN'S "TWENTY-ONE" WAX... truly a heavy duty wax—contains 18% solids—self-polishing. Ideal for floors subjected to heavy traffic. One coat often replaces two coats of ordinary wax, thus reduces maintenance and re-waxing costs.

it's safe *

FRANKLIN'S RUBBER GLOSS WAX... a tough, long wearing, self-polishing wax. Cuts maintenance costs on linoleum, rubber, asphalt tile, wood, etc. Withstands water and damp moppings. Classified by Underwriters' Laboratories as anti-slip.

A COMPLETE LINE OF FLOOR MAINTENANCE MATERIALS AVAILABLE UNDER YOUR OWN LABEL... sales assistance and prompt delivery of materials are assured by Franklin factory representatives, offices and warehouses located in principal cities from coast to coast.

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Please send me more information on Franklin floor maintenance materials.
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Pine Oil 230

- *Water White*
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Excellent results in disinfectants, soaps, paper, paint and many other industries. PINE OIL 230 is now available in tank cars and drums from this new and dependably steady source of supply. Send for typical analysis sheets.

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REPRESENTATIVE IN PRINCIPAL CITIES

NSSA Regional Meetings

Three regional dinner meetings of the National Sanitary Supply Association were held in the southeast last month. For the first time regional meetings were held in Charlotte, N.C., Aug. 16, and Birmingham, Ala., Aug. 19. The third meeting was held in Atlanta, Ga., Aug. 18.

John P. Stokes of Buildings Equipment & Supply Co., Richmond, Va., southern regional vice-president of NSSA, presided at all three meetings, which were also addressed by Lacy E. Crain, head of Conco Chemical Co., Dallas, president of the National Sanitary Supply Association, and Leo J. Kelly, executive vice-president of NSSA.

A similar program was arranged for the three meetings. It included an address on sanitation by E. Russell Jackson, supervisor, Food Handlers Training Program, Bureau of Sanitary Engineers, Florida State Board of Health. A panel discussion on "Wax—Its Use and Application and New Developments," was presented at the three meetings. Panel members included Jack Kahn of Windsor Wax Co., Hoboken, N.J., national vice-president of NSSA; Ralph FitzSimons, sales manager of T. F. Washburn Co., Chicago; John Walsh, Atlanta representative of Candy & Co., Chicago, and G. O. Haskell of Southern Chemical Products Co., Macon, Ga.

Among those present for the NSSA regional dinner meeting in Charlotte, N. C., Aug. 16, were, seated, l. to r.: Charles Solly, Harley Soap Co., Philadelphia; Burton L. Feinson, American Dispenser Co., New York, and eastern regional vice-president of NSSA; Mrs. Elsie C. Croft, Janitor Supply Co., Charlotte, and Lacy E. Crain, Conco Chemical Co., Dallas, NSSA president. Standing: J. B. Choate, Piedmont Mop Co., Charlotte; C. R. M. Sheppard, Fenole Chemical Co., Jacksonville, Fla., NSSA director; John P. Stokes, Buildings Equipment & Supply Co., Richmond, Va., southern regional vice-president NSSA; Leo J. Kelly, NSSA executive vice-president, and Jack Kahn, Windsor Wax Co., Hoboken, N. J., national vice-president of NSSA.

Mr. Jackson was introduced by C. R. M. Sheppard of Fenole Chemical Co., Jacksonville, Fla., a director of NSSA.

In charge of arrangements for the three meetings were: Charlotte, J. B. Choate, Piedmont Mop Co.; Birmingham, James Allen of Parker Products Co., Birmingham; and Atlanta, John Walsh.

Other scheduled regional meetings of NSSA include: southwestern, Hilton Shamrock Hotel, Houston, Tex., Sept. 23-24; eastern, Penn-Sherwood Hotel, Philadelphia, Oct. 11-12, and western, Sheraton Palace Hotel, San Francisco, Nov. 3-4.

—— ★ ——

Monsanto Merger Vote

The merger agreement between Monsanto Chemical Co., St. Louis, and Lion Oil Co., El Dorado, Ark., announced recently, will be

Scene during regional dinner meeting in Atlanta, Ga., Aug. 18.

Odor-distinction that's a merchandising asset

...yours, *at a practical price, with these*

Albert Verley
Essential Oils

Hydroxycitronellal

Terpineol Pure

Linalyl Acetate 90/92 —Ex-Bois De Rose

Amyl Cinnamic Aldehyde

Linalool Ex-Bois De Rose

Geraniol C.D.

YOU can adapt these inspiring Albert Verley compounds to your most critical formulas and maintain the quality standards which have established your reputation.

And you can do it without an excessive cost burden. Because of the power of these materials, a little goes a long way.

See for yourself what extremely interesting effects you can achieve. Write for working samples.

81

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Headquarters for Odor Appeal

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VERLEY CHEMICAL CO., 200 Pulaski St., Newark, N. J.
MEFFORD CHEMICAL CO., 1026 Santa Fe Ave., Los Angeles 21, Calif.

Representatives in all principal cities throughout the world

SYNTHETIC AROMATIC PRODUCTS AND ORGANIC ISOLATES • SYNTHETIC FLOWER OILS AND AROMATIC BASES • BOUQUETS AND FINISHED COMPOSITIONS.

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Zephyr-Brite Liquid Floor Cleanser
VOS Liquid Scrub Soap
UTL Liquid Scrub Soap
Wax Soap Cleanser
Wax Stripper
Terrazzo & Marble Cleaner
Synthetic Cleaner Concentrate
Liquid Surgical Soap
Seniorseptic (with G-11)
Castile Baby Soap
Hospital Green Jelly Soap
Liquid Toilet Soaps
40% Cocoanut Oil Liquid Soap
Coco-Castile Shampoos
Rug & Upholstery Shampoo
Pine Oil Disinfectant
Vegetable Oil Jelly Soaps
Metal Polish
Cedar Oil Furniture Polish
Mop & Floor Spray
Window Spray

Write for Description Samples and Price List

HAAG LABORATORIES, INC.

P. O. BOX 114, BLUE ISLAND, ILL.

submitted for approval by stockholders of the two companies on Sept. 23.

— ★ —

Edward C. Mulligan

Moran Elects Mulligan

The election of Edward C. Mulligan as secretary and a member of the board of directors of Moran Brush Co., Hamden, Conn., was announced recently by Miss Lillian Moran, president. Mr. Mulligan has been with the firm for the past four years. Previously he was with the General Motors organization as a sales representative. He attended the University of Connecticut and Yale University.

Miss Moran has been president of the firm since April 1 of this year and succeeded to the position vacated by the death of her uncle, Michael A. Moran, on Feb. 28. Miss Moran previously had been general manager of the company in recent years.

Miss Lillian Moran

"Roxite" F-T Waxes

Strohmeyer & Arpe Co., New York, recently introduced a line of synthetic hydrocarbon waxes to be sold under the trade name "Roxite." These are derived from crude "contact paraffin wax" resulting from the Fischer-Tropsch catalytic hydrogenation of carbon monoxide gases. With a high melting point (ranging from 75° to 105° C.) these waxes are hard and tough, imparting good gloss properties to polish formulations. Their color varies from light yellow to snow white. "Roxite" waxes are high molecular neutral paraffins, mostly of the straight-chain aliphatic type free from saponifiable matter. However, by a special process they may be oxidized and converted into a fully acid type of wax containing a high percentage of high molecular fatty and waxy acids.

Fischer - Tropsch processed waxes are being used for solvent-based liquid wax polishes, paste polishes, and other specialties.

Giuseppe
the maintenance man says:

Whatsa matter? You no sell TOWLSAVER? You no like to handle the FASTEST GROWING ONE?

Please excuse Giuseppe. His enthusiasm springs from his recent discovery of Towlsaver. Then somebody told him that Towlsaver, ORIGINAL controlled roll paper towel service and the leader in the West for 25 years, is now the fastest growing roll paper service in the country. That got him really steamed up, as it has some of the finest distributors everywhere. If you're interested, let us hear from you.

TOWLSAVER, INC.
2816 EAST 11TH STREET
LOS ANGELES 23, CALIF.

Towlsaver cuts towel consumption 1/3

Dr. W. J. Hale Dies

Dr. William J. Hale, 79, director of the organic research laboratory for Dow Chemical Co., Midland, Mich., from 1919 to 1934, died Aug. 8. Prominent in the science of chemurgy, he had been a research consultant for Dow since 1934.

—★—

FMC Advances Two

Two advancements in the chemical divisions were announced last month by Food Machinery and Chemical Corp., New York. Russell B. Stoddard, former manager of the company's Fairfield Chemical Division, has been assigned to the technical staff of FMC's chemical divisions' administrative offices in New York. Robert H. F. Dade, former southeastern manager of FMC's Niagara Chemical Division, has been named to succeed Mr. Stoddard as manager of Fairfield.

Formerly connected with U.S. Industrial Chemicals Co., Division

Russell B. Stoddard

of National Distillers Products Corp., New York, Mr. Stoddard was appointed acting manager of the Baltimore, Md., operation when it was acquired by FMC last year and established as the Fairfield Chemical Division. In New York he serves on the staff of Carl F. Prutton, vice-president of the corporation and technical director of chemical divisions.

Following service with the Bureau of Entomology of U.S.D.A., Mr. Dade was one of the founders in 1923 of Peninsular Chemical Co., Orlando, Fla. Peninsular was an insecticide producer and distributor for Niagara Sprayer and Chemical Co., now Niagara Chemical Division of FMC. Niagara acquired Peninsular in 1929. Mr. Dade has managed the Niagara Chemical Division's operations in the southeast for the past 26 years.

R. H. F. Dade

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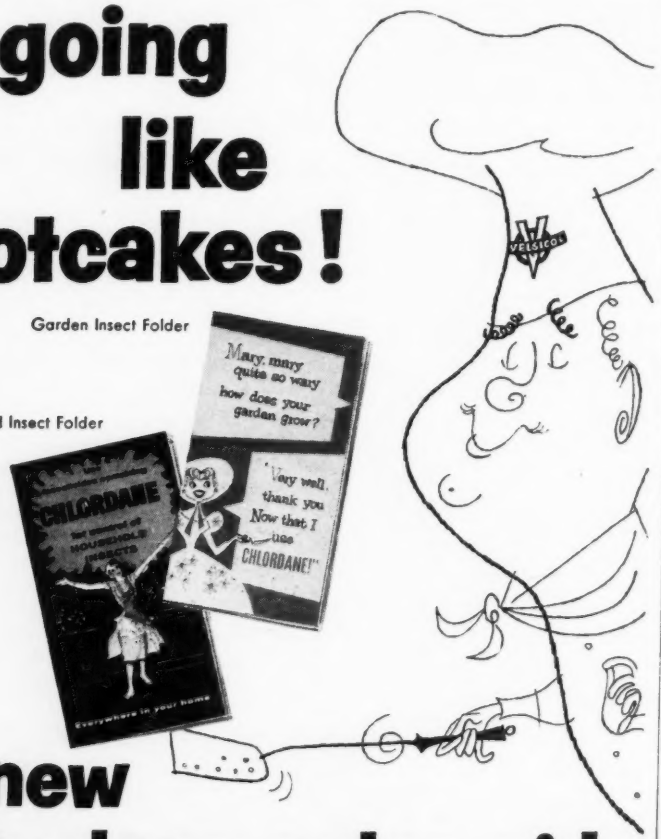
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CSMA Plans Moth Campaign

AT a meeting of the Moth Control Committee of the Chemical Specialties Manufacturers Association, held at the Chemists Club, New York, on August 11, preliminary plans for a general moth control publicity campaign were laid out. The campaign is to embrace all moth control materials and is designed primarily to educate the housewife in all-year prevention of moth damage. A consensus of committee opinion placed the expense of such a campaign at $50,000 for the first year, the expense to be borne by all suppliers of materials and producers and merchandisers of finished moth products on a voluntary contribution basis. The campaign will be conducted under the auspices of CSMA, but financed by separate contributions.

Two types of plans were submitted to the Committee in a resolution by the CSMA Board of Governors, the first calling for the inclusion of all moth control materials and the second specifying merely the consideration of a wider use of paradichlorabenzene and naphthalene. The Committee unanimously accepted the first plan which called for "the more extensive use by the public of all moth control and related products, such program to be under the sponsorship of producers and packagers of all such products."

Discussion at the Committee meeting indicated that better educated housewives in the matter of moth damage can reduce sharply the nation's annual bill for moth and carpet beetle damage of approximately a half-billion dollars. Because of the character of the campaign, it is believed that the Committee will receive whole-hearted cooperation from radio and television stations, women's clubs, women's column editors, magazine editors, and U. S. Government and state officials. Several specific plans will be considered at a meeting of the Committee to be held at the time of the CSMA Board meeting, September 28 or 29, including methods of financing the campaign.

Those who attended the Committee meeting on August 11 included the following: Don J. Templeton, Stanley Home Products, chairman; Fred A. Koch, Dow Chemical, vice-chairman; John M. Glaze, Hooker Electrochemical; Charles Fredericks and Ernest S. Jaros, Reefer-Galler; J. C. Hutchison, Monsanto Chemical; E. W. van der Wolk, Koppers Company; Frank M. Whaley, Dow Chemical; Charles A. Poderzay, Standard Chlorine Products; Nelson Latremore, Judson Dunaway; James E. Shand, Barrett Division; Fred W. Wolff, Dupont; H. W. Hamilton, secretary of the Chemical Specialties Manufacturers Association.

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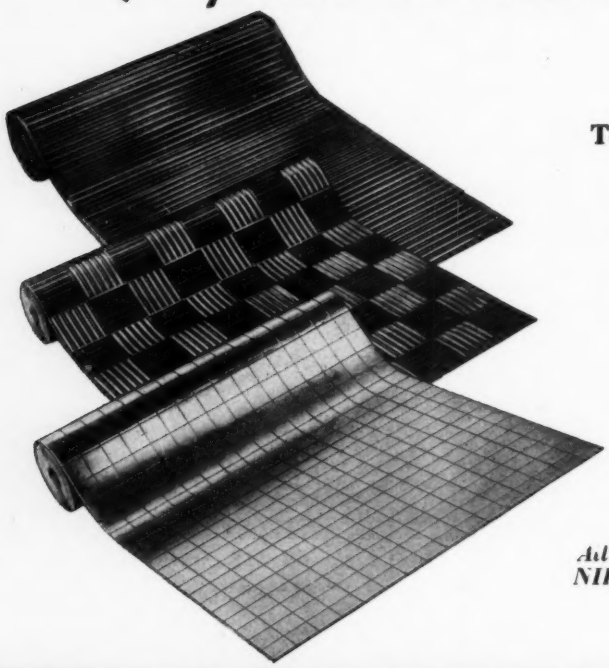

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New Fly Trap

A new fly trap and non-poisonous lure were introduced last month by Fly Control Corp., Tulsa, Okla. Said to be capable of catching over 50,000 flies a day, the "Smith Poly-Gruv" fly trap is made of aluminum, four feet long, three feet high, and 32 inches deep. It is claimed to be effective in an area up to 450 yards in diameter and to require a minimum of attention.

— ★ —

CSMA Luncheon Sept. 28

A luncheon for all members of the Chemical Specialties Manufacturers Association will be held in the Crystal Room of the Savoy Plaza Hotel, New York, Sept. 28. The luncheon will precede the fall meeting of the Board of Governors of CSMA on Sept. 29, according to H. W. Hamilton, secretary. Melvin Fuld of Fuld Brothers, Inc., Baltimore, president of CSMA, will preside.

Features of the luncheon include a discussion of product specifications and related subjects by J. S. Fassett and G. E. Ainsworth of the American Hotel Association. In addition, reports on economic conditions in Europe, particularly in the chemical specialties field, will be given by George W. Fiero of Esso Standard Oil Co., New York; W. S. Jessop, U. S. Sanitary Specialties Corp., Chicago, and Abraham Wiener of Standard Naphthalene Products, Inc., S. Kearny, N. J. All three men recently visited Great Britain and the European continent.

New fly trap and non-toxic lure announced recently by Fly Control Corp., Tulsa. Unit, made of aluminum, is four feet long, three feet high and 32 inches deep. It is said to be capable of luring 50,000 flies per day, and is claimed effective in an area up to 450 yards in diameter.

— ★ —

Federal Wax Remover

A new concentrated wax remover has just been placed on the market by Federal Varnish Division, Chicago. Effective in 10 or even 15 parts of water, "Wax Kutter" is said to combine economy with speedy action in the removal of old wax films and surface accumulations. The product is said to cause no discoloration.

— ★ —

Walker Starts Own Firm

Formation of J. T. Walker Laboratories at 1269 Grandview Avenue, Columbus, Ohio, was announced recently by James T. Walker, Sr. The new firm will handle institutional chemical specialties in the sanitary maintenance field. Mr. Walker had been associated with Vestal, Inc., St. Louis, for the past 18 years, and with Huntington Laboratories, Inc., Huntington, Ind., for the preceding nine years. Mr. Walker's two sons will join him in the firm when they return from service with the Armed Forces.

Robert Svendsen, executive vice-president of Chase Products Co., Maywood, Ill., shakes hands with James M. Darvan, Chase export manager, congratulating him on the 50 millionth aerosol turned out by the firm. The aerosol insecticide container held by Mr. Darvan is part of a private label shipment destined for Argentina, which put Chase over the 50 million mark. Chase began pressure packing aerosols in 1947.

— ★ —

Gibbs is Michigan P. A.

Appointment of Walter Gibbs as purchasing agent was announced last month by Michigan Chemical Corp., Saint Louis, Mich. Having joined Michigan Chemical in 1935 when the Saint Louis plant was under construction, Mr. Gibbs has been a member of the operations and maintenance departments, and most recently acting purchasing agent.

— ★ —

Rojas Witco Vice-Pres.

Henry W. Rojas has joined Witco Chemical Co., New York, as vice-president of export marketing, it was announced last month by Max A. Minnig, executive vice-president. He will be responsible for all international operations of the firm and will have headquarters in New York. Mr. Rojas comes to Witco after 21 years with American Cyanamid Co., New York, where he served as export manager of the indus-

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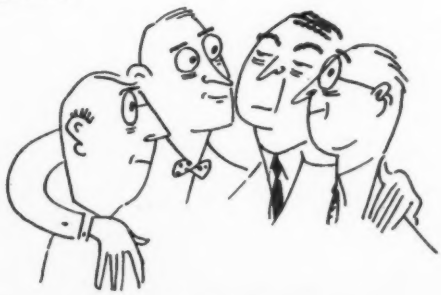

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Paint Strippers

(*From Page* 169)

ponent systems before deciding on a simple immersion method using test tubes. Thus, the values of the dual solvents were assessed without having to include evaporation retarders and viscosity modifiers. The method proved to be applicable for screening large numbers of test solutions with a minimum of time and effort. The technique of testing consisted of immersing coated nails in solutions in test tubes and either observing the wrinkling time, or withdrawing the specimen after a pre-determined period and estimating the extent of film removal. The experiments on the various coatings were first performed with methylene chloride in order to establish a basis for comparison and to decide on the type of test best suited for the system.

Six inch nails commonly described as 60 penny nails were sorted for uniformity and the pointed ends were rounded and polished to remove sharp edges. Preliminary trials with pointed nails gave unreliable results because the thinly coated sharp edges were readily attacked by the solvents. The break in the coating was quickly followed by channeling of the remover under the film.

The specially prepared nails were hung in a perforated board whose holes were arranged in circles of different diameters all having a common center. A board was placed over the head of the nails and fastened in position to maintain the nails firmly in the rack. The sets of nails were then degreased, dried and dipped into quart cans of paint after which they were allowed to drain. The racks of wet nails were next inverted to prevent formation of hanging drops and then placed to dry overnight in a dust free chamber. A 16 hour bake at 100°C. concluded the preparation of the test surfaces.

A description of the paint systems used is given in Appendix I.

Test Results with Water-Based Paints (Table II): System A-1 (Polyvinyl Acetate)—The results reported in Table II show that the addition of all co-solvents under investigation detracted from the performance of methylene chloride.

System A-2 (Acrylic)—The wrinkling times of all the combinations are given in Table II. Methylene chloride by itself proved to be an effective stripper. The addition of co-solvent either failed to reduce stripping time or acted as an inactive diluent.

System A-3 (Styrene-butadiene)—The inclusion of minor quantities of methyl acetate, Cellosolve and benzol appeared to slightly improve the stripping action of methylene chloride.

Tests with Oils and Oleoresinous Paints (Table III): System B-1 (Drying Oil)—There were no significant improvements obtained with any of the tested solvent additives. With the exceptions of methanol and chloroform, all of the additives acted as inactive diluents at the 40 percent concentration level.

System B-2 (Soya Alkyd)—The use of methanol, methyl acetate and Cellosolve improved the wrinkling time of methylene chloride. This effect was particularly marked with methanol and methyl acetate at five percent concentration. The balance of the co-solvents appeared to behave as diluents for methylene chloride.

System B-3 (Air Dried Phenolic)—Methylene chloride by itself failed to remove this coating after immersion for 15 minutes. However, with the incorporation of methanol the film was completely stripped within a relatively short contact period.

System B-4 (Baked Phenolic)—None of the solvents tested were capable of removing the baked phenolic coating even after immersion for 90 minutes.

Tests with Rubber-Based Paints (Table IV): System C-1 (Chlorinated Rubber)—The efficiency of methylene chloride was drastically improved by minor and massive additions of methanol and acetone, and by the minor additions of Cellosolve and dimethylformamide.

System C-2 (Styrene-Butadiene)—Methylene chloride by itself was extremely rapid in action on this system. Therefore, we did not explore the effect of additives.

Tests with Varnishes (Table V): System D-1 (Epon)—Methylene chloride stripped this coating within 40 seconds. In view of the rapid action, it was not considered necessary to test the effect of additives.

System D-2 (Styrenated Alkyd)—The inclusion of five percent methanol with methylene chloride effectively reduced wrinkling time from no removal after 10 minutes to removal within 60 seconds. Lesser improvements in performance were obtained with methyl acetate, benzol and dimethylformamide.

System D-3 (Drying Oils)—A wrinkling time of 26 seconds with methylene chloride obviated the need for added solvent action.

System D-4 (Phenolic Resin)—Improved performances were obtained with methanol, methyl acetate, benzol, chloroform and dimethylformamide at five percent concentration. The only co-solvents which aided wrinkling time at 40 percent concentration were methanol and chloroform.

System D-5 (Urea-Alkyd)—The stripping action of methylene chloride was improved by the use of five to 40 percent methanol, five percent methyl acetate, five to 40 percent chloroform and five percent dimethylformamide.

System D-6 (Urea-Melamine)—Marked reductions in film removal were obtained with the following co-solvents: five to 40 percent methanol, five to 40 percent acetate, five percent acetone, five percent Cellosolve and five percent chloroform.

(*To be concluded*)

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Burnett Celite Manager

Clinton B. Burnett has been named general manager of the Celite Division of Johns-Manville Corp.,

Clinton B. Burnett

New York, it was announced recently by A. R. Fisher, president of the corporation. He succeeds Arthur S. Elsenbast who retired July 31.

Having joined Johns-Manville in 1931, Mr. Burnett was director of engineering prior to his appointment as assistant general manager of the Celite Division in 1954. He will continue as a vice-president of the corporation in addition to his new responsibilities. These include operation of a plant and diatomite mine located at Lomco, Calif., and distribution and sales of the whole range of diatomite products manufactured by Johns-Manville.

— ★ —

Koppers Tar Shifts Five

Five changes in the sales department of Tar Products Division, Koppers Co., Pittsburgh, were announced last month by J. C. Macon, manager of the sales department.

Walter L. Bossart, formerly assistant manager, refined coal tar products section, has been named manager of the section to succeed J. H. Carpenter, who is due to retire in less than a year. Mr. Carpenter, who has been manager since 1929, will continue with the section in the capacity of consultant.

J. H. Roche, manager of sales development prior to its consolidation in the new development department, has been appointed technical consultant to the creosote and pitch product section, reporting to the product manager.

J. M. Strouss, Jr., who has been appointed manager, order section, succeeds W. W. Hoover, Jr., who has been advanced to the cold applied coatings section.

— ★ —

Kenya Pyrethrum Labs

New laboratories for chemical and entomological analysis and research in the pyrethrum field were completed recently at Nakuru, Kenya. Built by East African pyrethrum growers, the laboratory will be part of the new executive offices of the Pyrethrum Board of Kenya. The chemical work at the laboratory will be a continuation and extension of work previously carried out at the Scott Agricultural Laboratories in Nairobi. However, incorporation of an entomological service is new.

Jobber "Shows and Sells"

(*From Page* 185)

evidenced, for example, in the way Crandall's handles leads from manufacturers. Such leads are thoroughly followed up and an itemized report of the results submitted. "We are always glad to follow the suggestions of manufacturers and their salesmen very carefully," pointed out Mr. Crandall.

While the selling procedure is mainly by personal contact, the company relies heavily on direct mail to pave the way. The firm maintains a large mailing department above its showroom and has a list of about 3,000 customers and prospects. Listed firms are continually receiving letters and pamphlets on new products and services available. Some of these pieces feature merchandise manufactured for the firm under its own private label, others advertise well-known brand names. Blotters, folders, postcards and various types of manufacturers' literature are distributed constantly.

For deliveries nearby the company uses its own large truck; otherwise chartered trucks are hired for shipments as far away as 250 miles. Orders are shipped, regardless of number of items, within 48 hours so that there are few, if any, back orders.

A recent addition is a "clean-mobile truck" which serves as a sort of portable salesman, equipped with shelves and racks filled with quick turn-over items for small volume users. This van has a definite daily route and time schedule, calls on such customers as the smaller restaurants, taverns, gas stations, liquor houses, funeral homes, etc., and thus caters to the needs of the small volume account who can't very well get away from his business to visit the Crandall showroom. The use of the truck has resulted in a sharp upturn of orders from this field.

The staff of 10 employees, besides the nine salesmen, or 19 in all, is partially supervised by the owner's wife, Mrs. Miriam Crandall, who is advertising and personnel manager. Another key executive is Edward F. Frederick, general manager and senior employee, who has been with the company since working part-time after school, except for an interim with the armed services.

In his planning, Mr. Crandall made it a point to stay out of the larger metropolitan cities so as not to compete with the well-established dealers there. "We can be considered as a representative, medium-sized operation," he declared. "But in expanding, our aim has been to 'beat the bushes' thoroughly in the not so densely populated sections which have been passed over or more or less neglected by the larger suppliers. Fundamentally we're trying to fill the gap that has existed in these off-the-beaten-path areas for many years by offering a complete program of delivery and service, both of machines and materials."

Mr. Crandall is well-known in the industry, having participated in a panel discussion during the annual convention of National Sanitary Supply Assn. in Atlantic City. He also was a panel member during the NSSA regional meeting in New York City last fall.

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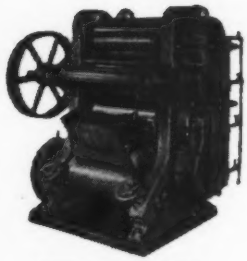
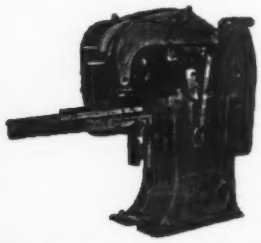


TOILET SOAP MILLS
3 Roll — 4 Roll — 5 Roll
STEEL and Granite Rolls



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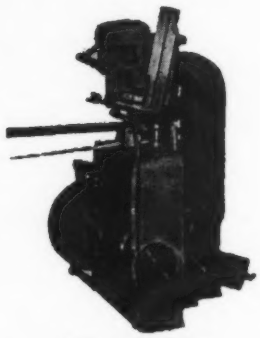

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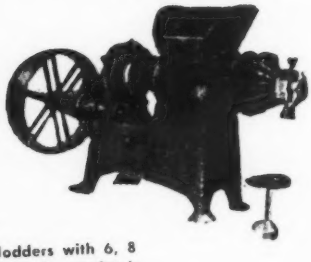

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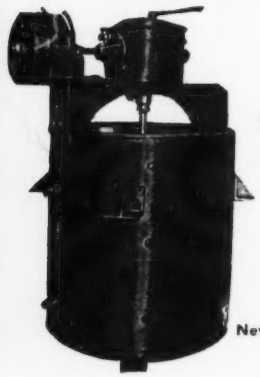

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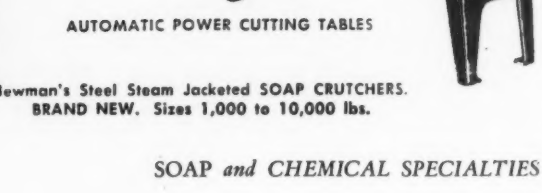

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Chemist Wanted: By leading essential oil house. Qualified in perfume compounding. Please give details of education, experience and salary requirements. State whether willing to relocate. Address Box 510, c/o *Soap.*

Chemists Wanted: With experience in the formulation of degreasing compounds of all types; rust and scale removers; boiler compounds and other specialties for direct sales to industry. Resume and salary requirements in first letter. All replies confidential. Our staff knows of this ad. Address Box 509, c/o *Soap.*

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Sales Representative: Knowledge of fatty acids and plasticizers and their uses helpful. Chemical education and sales experience necessary. Ohio and Mid-West territory, travel includes some weekends. Salary commensurate with experience and ability. Car furnished. Age to 35. Send full resume. Harchem Division, Wallace & Tiernan, Inc., 25 Main Street, Belleville, N. J.

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Chemist: Widely experienced in waxes, polishes, emulsions, floor coatings, automotive chemicals, household products, — desires connection with progressive firm. Metropolitan New York area preferred. Experienced in production, development and research. Address Box 512, c/o *Soap.*

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Industrial Traffic Manager: ICC practitioner, over twenty years experience, all phases up to and including administering department. Married. College and Academy graduate. Record Available. Address Box 518, c/o *Soap.*

Interested in insecticides, disinfectants, floor products? Take a look at page 158 of this issue.

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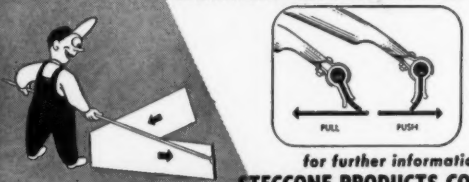

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For Sale

Canadian Opportunity: For Sale — Established sanitary products manufacturer with $300,000. volume located in Toronto, offers outright sale of all facilities. For further information write to Box 514, c/o *Soap*.

Soap Manufacturing: Sound Investment—Manufactures and distributes its own well-known brand thruout the Midwest. Well established chain and independent markets. Profitably operating 35 years and ideally located in busy community within 50 miles Chicago. Gross sales over $200,000 show good net return. Low overhead and production costs assure continued profitable operations. Conservative asking price of $300,000, including all equipment, inventory and miscellaneous assets of equal value. Financing available. Address Box 515, c/o *Soap*.

For Sale: By I. E. Newman, 5602 Blackstone Ave., Chicago, Ill. Crutchers 1000-6000 lbs.; Wrapper type S; Plodder 10″; auto. Table 2 way; Jones auto. Presses; 100-8000 lb. Powder mixers; Boilers; All kinds soap and chemical equipt.

More Money for Jobbers: Bionetic—proven by industrial and municipal waste treatment technologists. Used by hotels, resorts, institutions, and cities. Cleans Septic tanks and cesspools. Eliminates odor. Clean grease traps. National and local co-operative advertising to assist you. Write Reliance Chemicals Corp., P. O. Box 6724, Houston 5, Texas.

Interested in Chemical Specialties, See page 158 for more complete details.

For Sale

For Sale: We have inexpensive terpenes and fractions from essential oils such as lemon, lime, orange, cedarwood, anethol, citronella, lemongrass, etc. Useful in technical perfumes and for scenting janitor supply products; in soaps and allied products; for all types of sprays; for odor masking; etc. We also have low priced perfume oils, and some special prices for lavender oil, ocotea cymbarum, terpineol, etc. Address Box 516, c/o *Soap*.

For Sale: Sparkler Iron Filter model 14-S-8. 300 gal. hour. Sparkler Iron Filter model 8-3, 60 gal. hour. 6—55 gal. steel drums with heavy copper lining. 25 gross 2-oz. amber jars. 10 gross 8-oz. amber round bottles. This equipment like new. Honan Crane oil purifier—new. Address Box 517, c/o *Soap*.

For Sale: Soap dispensers for waterless, cream, paste — porcelain enameled—heavy construction—10 pound capacity. National Soap Dispenser, 10216 La Salle Ave., Los Angeles 47, Calif.

For Sale: Powder mixers, pulverizers, Hammermills, etc. Stainless steel jacketed kettles up to 1,300 gal.; Aluminum and stainless steel tanks—up to 10,000 gal. cap. Perry Equipment Corp., 1410 N. 6th St., Phila. 22, Pa.

576 Pages of practical informaties, history, testing & uses of disinfectants, household & industrial insecticides, floor products, soap, specialties, etc. Covers also the subject of labeling and packaging of insecticides, etc. See page 158 for further particulars.

For Sale

For Sale: Allbright-Nell 4′ x 9′ chilling rolls. Blanchard #14 soap powder mill. Lehmann 4-roll. W.C. 12″x36″ steel mill. Houchin 8½″x 16″ 3-roll and 18″ x 30″ 4-roll Granite Stone Mills. Kettles and tanks. Jones automatic soap presses. Empire State foot presses. Soap frames. Slabbers and cutting tables. Crutchers. Six-knife chipper. Filter presses 12″ to 42″. Wrapping & sealing machines. Powder, paste & liquid mixers. Rotex sifters. Filling machines, Grinders, Hammer mills. Portable electric agitators, pumps, etc. Send for bulletin. We buy your surplus equipment. Stein Equipment Company, 107—8th St., Brooklyn 15, N Y. STerling 8-1944.

Standard Reference Books:
See page 226

Two Kinetic Appointments

Kinetic Chemicals Division of E. I. du Pont de Nemours & Co., Wilmington, Del., recently announced two appointments: Richard H. Hoffman becomes sales correspondent in the division's Chicago office and Douglas H. McKenna has been assigned as sales representative for "Freons" in the Milwaukee, Wis., territory.

— ★ —

Hercules Dividend

Hercules Powder Co., Wilmington, Del., declared a regular quarterly dividend of 1¼ percent, equal to $1.25 a share on its preferred stock, payable Aug. 15, to stockholders of record Aug. 1.

Tremendous Selection
Modern Machinery

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Rebuilt Machinery
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Rebuilt and Guaranteed

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R. A. Jones E and Houchin Semi and Automatic Soap Presses.
J. H. Day 15 to 10,000 lb. Dry Powder Mixers.
Robinson, Tyler Hum-mer, Great Western, Rotex, Day Sifters.
National and Lehman 3 and 5 Roll Mills; steel-granite-porcelain.
New Era Soap Amalgamators.
Stokes and Smith G1, G2, G6, HG88 Auger Powder Filters.
Pony M, MX, Ermold, World Semi and Automatic Labelers.
Standard Knapp 429 Carton Sealer; Jones, Ceco Carton Sealers.
Hudson Sharp Campbell Automatic Cellophane Wrapper.
Oliver 799-J Wrapper with Cardboard Feed and Labeling Attachment.
Package Machinery FA, FA2, FA4; Scandia Wrappers.

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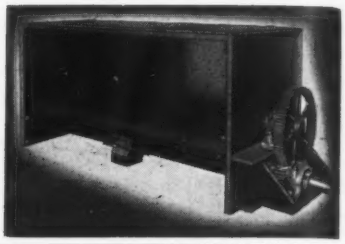

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Rudolph Zinsser Dies

Rudolph Zinsser, 65, vice-president of William Zinsser & Co., New York shellac manufacturers, died Aug. 14 at his home in Kings Point, N.Y. A graduate of Princeton University with a master's degree from Columbia University, Mr. Zinsser joined the firm in 1911. Said to be the oldest of its kind in the United States, it was founded by Mr. Zinsser's grandfather in 1849. Elected Mayor of Kings Point in 1952, Mr. Zinsser served until his death.

— ★ —

Lang in New Johnson Post

Richard O. Lang has been appointed a regional director in the international division of S. C. Johnson & Son, Inc., Racine, Wis. He will direct the firm's operations in Europe, Africa, and the Near East. For the past 11 months Dr. Lang had been on leave of absence from the company to serve as deputy director to H. F. Johnson in the Office of Industrial Resources of the Foreign Operations Administration in Washington. Mr. Johnson, president of the wax firm, resigned as director of the office on June 30.

Richard O. Lang

— ★ —

Bercow Joins Robeco

Alan D. Bercow has joined the export department of Robeco Chemicals, Inc., New York, it was announced last month. A graduate of M.I.T., Mr. Bercow was released recently from Army duty in Korea.

Joseph Fuld Recovers

Joseph Fuld, vice-president in charge of sales for Fuld Brothers, Inc., Baltimore, is recovering from a serious abdominal operation he underwent recently. He has returned to his duties at Fuld Brothers on a full-time basis, after having served for several weeks on a part-time basis.

— ★ —

Smith in New Silicones Post

Bruce F. Smith, manager of technical service in the International Department of Dow Corning Corp., Midland, Mich., has been transferred to the company's Canadian affiliate, Dow Corning Silicones, Ltd., Toronto. He assumed his duties Sept. 1 as manager of the Canadian firm's newly established branch office in Montreal, Que. Mr. Smith has specialized on problems of Canadian customers since the incorporation of Dow Corning Silicones, two years ago. He was four years in Dow Corning's export sales service and two years in the product engineering laboratories.

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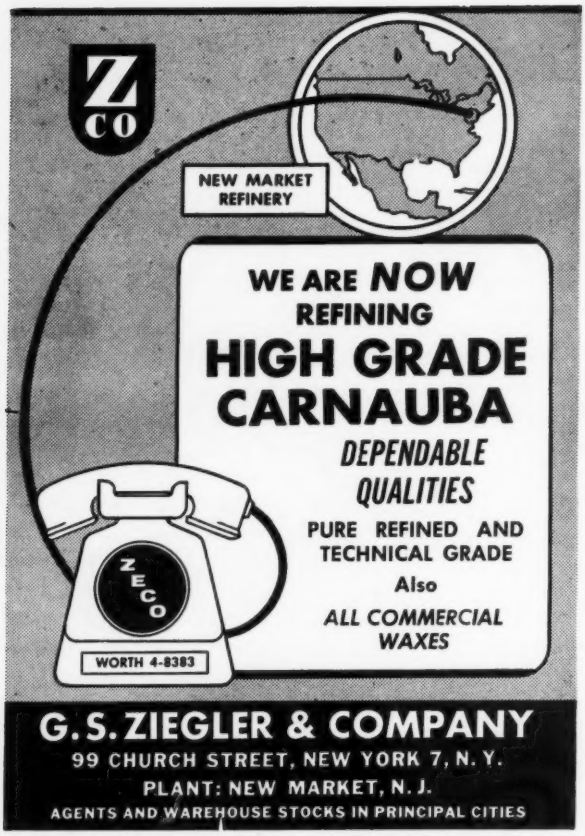

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There's a type to fill your retail container best—be it bubble bath, rug shampoo, car wash, or all-purpose cleaner.

Or if you compound, one of these densities can give your finished product the uniform bulk you need. SULFRAMIN AB-40 Beads have high wall strength too, keeping breakdown and dusting to a minimum and will add to the free-flowing properties of your product.

Fill in the coupon below and we'll send you samples. Try it. Then judge for yourself if this isn't the one detergent you've been looking for.

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Increasing Jobber Sales

(*From Page* 193)

arousing advance interest in his personal sales presentation. But in order to do any of these jobs, it has to be properly designed and capable of putting across a convincing message. The same rules of eye-appeal and buy-appeal in art and copy apply in preparing labels, advertisements and other material, and must be put to work in the distributor's self mailers, envelope stuffers, circulars, flyers, etc. Another very practical, hard-working and low-cost member of the direct mail family is the double reply card—with one side devoted to the sales message and the other consisting of a postage-free order card for the customer's convenience. A series of these, if handled wisely, can produce very profitable results for a minimum investment.

Other types of selling assistance available to sellers of TFW products under the new program include general sales counsel, to help the distributor determine what selling approaches and what type of sales program will best suit his particular needs; advice and suggestions for the planning and preparation of visual presentations, sample kits, demonstration techniques and other sales tools for use by the men in the field; suggestions and ideas for trade show booths, permanent display room exhibits, etc.

Emphasis throughout the program is on flexibility to meet the individual distributor's special needs —through whatever methods will do most to "help the man who sells it!"

Layout for publication advertisement, which has been designed for sanitary supply jobber.

Pilot Soap Plant

(*From Page* 48)

a record of the soap base and the perfume used as well as a record of the periodic evaluation of the soap bars during a twelve months' period. A uniform number of cakes is retained from each batch and stored in the soap file. Some of these cakes are exposed to light and air, re-examined and returned to the file. Some are observed under hand-washing conditions, and others are subjected to ultra-violet light or heat in ovens. Still others are saved in the file to be opened at intervals and examined for shelf-life data.

The search for new synthetic materials plays an important part in any soap perfume development project. At Givaudan's Delawanna plant the research laboratories are continually producing new chemicals which are evaluated for application in soap perfuming. Each chemical is tested in soap, at first by itself and later, if it seems promising, as part of a soap perfume. Attention is paid to any tendency of the chemical to fade out in the soap or to cause discloration. New materials are sought which combine good stability and odor quality in soap with ready availability and moderate cost.

Soap fragrances, which are stable under all conditions of use, result from testing procedures and equipment employed in a laboratory such as the one set up by Givaudan at the Delawanna plant.

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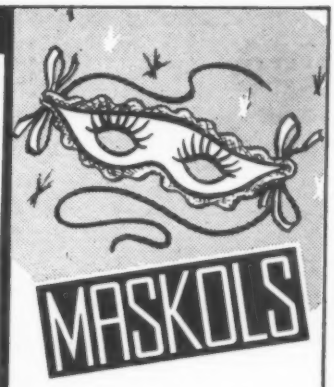

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* * * *

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2. SOAPS AND DETERGENTS

(512 pages)
by E. G. THOMSSEN
and JOHN W. MCCUTCHEON

3. MODERN CHEMICAL SPECIALTIES

(514 pages)
by MILTON LESSER

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(576 pages)
by LEONARD SCHWARCZ

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* * * *

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☐ **Synthetic Detergents** $7.10 in U.S.A.* $7.60 elsewhere

☐ **Soaps and Detergents** $9.00 in U.S.A.* $9.50 elsewhere

☐ **Modern Chemical Specialties** $7.25 in U.S.A.* $7.75 elsewhere

It is understood that if these books are not what I want, I may return them within 10 days in good condition for a full refund of the purchase price.
(*Add 3% sales tax if in New York City.)

Coming Meetings

American Public Health Association, 83rd annual meeting, Municipal Auditorium, Kansas City, Mo., Nov. 14-18.

Association of American Soap & Glycerine Producers, Inc., 29th annual meeting, Waldorf-Astoria Hotel, New York, Jan. 25-27, 1956.

Chemical Specialties Manufacturers Association, luncheon and general membership meeting, Savoy Plaza Hotel, New York, Sept. 28; 42nd annual meeting, Roosevelt Hotel, New York, Dec. 5-7; 42nd midyear meeting, Drake Hotel, Chicago, May 20-22, 1956.

Drug, Chemical and Allied Trades Section of the New York Board of Trade, Pocono Inn, Pocono Manor, Pa., Sept. 22-24.

Entomological Society of America, annual meeting, Netherlands Plaza Hotel, Cincinnati, Nov. 29-Dec. 2.

Exposition of Chemical Industries, Commercial Museum and Convention Hall, Philadelphia, Pa., Dec. 5-9.

Grocery Manufacturers of America, annual meeting, Waldorf-Astoria, New York, Nov. 16-18.

National Chemical Exposition, Public Auditorium, Cleveland, Nov. 27-30.

National Pest Control Association, 22nd annual convention, Denver, Colo., Cosmopolitan Hotel, headquarters hotel, Oct. 17-20.

National Sanitary Supply Assn., 33rd annual convention and trade show, Conrad Hilton Hotel, Chicago, Apr. 29, 30 and May 1, 2, 1956; eastern regional meeting, Penn Sherwood Hotel, Philadelphia, Oct. 11, 12.

Packaging Machinery Manufacturers Institute annual meeting, The Homestead, Hot Springs, Va., September 15-18, 1955; packaging machinery and materials exposition, Public Auditorium, Cleveland, O., Sept. 11-14, 1956.

Plant Maintenance Show, Convention Hall, Philadelphia, Jan. 23-26, 1956.

Society of Cosmetic Chemists, seminar, Barbizon Plaza Hotel, New York, Sept. 15, 16; 10th anniversary meeting, Commodore Hotel, New York, Dec. 15.

Supermarket Institute, midyear meeting, Palm Springs, Calif., Jan. 8-12, 1956, annual convention, Cleveland, May 6-9, 1956.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meetings, Commodore Hotel, New York, Sept. 14, Oct. 11; annual dinner, Dec. 1.

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Tale Ends

A gold plated soap dispenser! (We ran a picture of it in the August issue.) That's one to comb out of your whiskers. And, of all places, it originates in Jolly Old England, but is being sold in the U. S. and Canada. True to British tradition, this dispenser is built like a red brick outhouse, designed to last, we would guess, about 99 years. But this idea of gold plating a soap dispenser is really one for the book. We wonder in what manner of washroom these gold plated machines are designed to be used.

* * *

Two Russian stenographers in Geneva for the recent four-nation confab were delighted while riding in a bus in Geneva to read a sign which stated "Mir Mir." Now, it seems that "mir" is peace in Russian, the favorite red propaganda theme. The girls really believed they were aboard a Commie joy wagon and were delighted that their propaganda had hit Geneva. But they were later sadly enlightened. "Mir" is the name of a popular Swiss soap powder.

* * * *

Yellow fever mosquitoes are known to be breeding in certain parts of Texas, according to a bulletin issued by the Texas State Health Department by Dr. Henry A. Holle. The bulletin points out that the mere presence of these mosquitoes, "Aedes aegypti," is a potential menace to health in the light of wide travel by many people in the infested areas. The insect itself seldom flies more than 100 yards from its breeding place. It breeds in stagnant water. During the Spanish-American War, yellow fever killed more Americans than Spanish bullets. The mosquito is easily controlled with DDT. Up and at 'em, Texas!

* * * * *

The constant use of cold cream to cleanse the skin, according to Dr. Samuel Ayres III of the University of Southern California, may produce a skin condition known as *pityriasis folliculorum*. On the other hand, says this medico, most women's skin will tolerate soap and water in regular use, especially if it's followed by an application of cream. And what's more, this *pityriasis folliculorum* causes skin roughness, dryness and itching. No mention is made of fallen arches or dandruff by the good doctor. So, you babes had better use soap and water to wash your faces or *pityriasis folliculorum* is liable to get you.

* * * * *

With keen and unusual interest, we note that the Kangaroo Soap Co. of South Australia has ceased operations. After 62 years, the company states that it has quit all manufacturing and marketing in the soap field. We wonder if they ran out of kangaroos or if the competition from the big fellows was just too much. A lot of smaller soapers in the U. S. would like to know also.

* * * * *

Congratulations to the Department of Health for the city of Harrisburg, Penna.! They have issued a neat little folder which bears a skull and crossbones on the outside with the words "most people know that poisons should be kept away from children." Then it goes on to say inside "but most accidental poisonings of children are from common household substances not labeled poison." It then warns if children swallow something, call a doctor, don't wait, ask him what to do. An excellent job. More cities should follow Harrisburg's example with the booklets!

* * * * *

Long ago, in some now forgotten raid in a bootleg still, Federal agents picked up a five-gallon jug of moonshine booze. Recently, it was tried out as a cleaning agent to remove old ink from the fingerprint board of the U. S. Marshall at Miami, Fla. "Best cleaning fluid we ever had around this office," said the Marshall. Maybe it's an idea for some enterprising cleanser manufacturer with a couple of good moonshine connections.

* * * * *

Always we've thought that this alleged shortage of "management timber" was the bunk. And likewise this going into a wholly foreign industry to pick off "top" men. So we read a letter in "Business Week" from a Chicago engineer in which he said: "Executive success in one field does not necessarily insure the same in another. A winning smile might do wonders in promotion and selling, but could be completely overlooked in precision tool production." How true. And, we might add, in running a floor wax factory. Sometimes we get the feeling that these management consultant blokes are dealing us up mostly slush when they gab about "management timber."

* * * * *

Should be a big boom in hair oils and hair tonic in England! The papers say that the Duke of Edinburgh, thinning a trifle on the top at the ripe old age of 34, is trying out a new hair grower designed by his barber, one Charles Topper. The Duke's new hair goo is said to be "light and non-greasy specially blended with a little oil." Non-greasy, but blended with oil. Quite a trick if you can do it, we'd say.

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